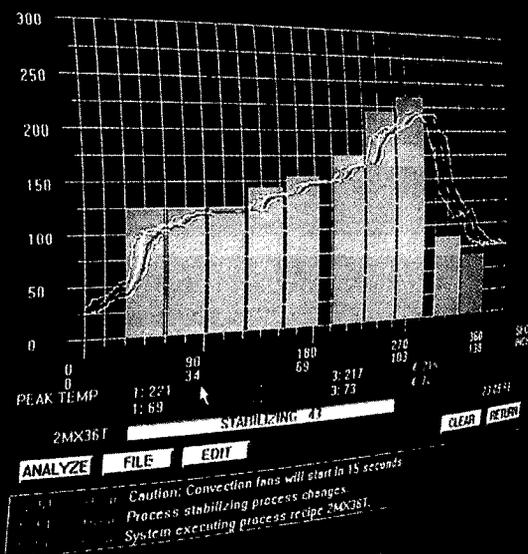


1998 Motor Vehicle Occupant Safety Survey

Volume Two

Seatbelt Report

DOT HS 809 051



2



| | | | | | |
|--|--|---|--|----------------------------|-----------|
| 1. Report No. DOT HS 809 051 | | 2. Government Accession No. | | 3. Recipient's Catalog No. | |
| 4. Title and Subtitle 1998 Motor Vehicle Occupant Safety Survey: Volume 2 Seat Belt Report | | | 5. Report Date March, 2000 | | |
| | | | 6. Performing Organization Code | | |
| 7. Author(s) Alan W. Block, Office Of Research and Traffic Records, NHTSA | | | 8. Performing Organization Report No. | | |
| 9. Performing Organization Name and Address Schulman, Ronca & Bucuvalas, Inc. 8403 Colesville Road, Suite 820 Silver Spring, MD 20910 | | | 10. Work Unit No. (TR AIS) | | |
| | | | 11. Contract or Grant No. | | |
| 12. Sponsoring Agency Name and Address National Highway Traffic Safety Administration Office Of Research and Traffic Records 400 Seventh Street, S.W. Room 6240 (NTS-30) Washington, DC 20590 | | | 13. Type of Report and Period Covered Survey conducted Nov. 5, 1998 to Jan. 12, 1999 | | |
| | | | 14. Sponsoring Agency Code | | |
| 15. Supplementary Notes | | | | | |
| 16. Abstract <p>The 1998 Motor Vehicle Occupant Safety Survey was the third in a series of biennial national telephone surveys on occupant protection issues conducted for the National Highway Traffic Safety Administration (NHTSA). Data collection was conducted by the firm Schulman, Ronca & Bucuvalas, Inc., a national survey research organization. The survey used two questionnaires, each administered to a randomly selected national sample of about 4,000 persons age 16 and older. Interviewing began November 5, 1998 and ended January 12, 1999. This report presents the survey findings pertaining to seat belts. Detailed information on the survey methodology, as well as copies of the questionnaires, are contained in a separate NHTSA report ("1998 Motor Vehicle Occupant Safety Survey: Methodology Report").</p> <p>More than three-quarters of drivers (79%) said they wore their seat belt "all the time" while driving, but 10% of these immediately said on a follow-up question that they did not use a seat belt while driving at least once in the past day or week. Adjusted measures of reported seat belt use based on these two questions closely matched observed seat belt use in a NHTSA national observation survey conducted about the same time. Reasons for non-use among part time users revolved around risk perception, while non-users cited discomfort or "other" considerations such as issues of personal freedom, concern about seat belts being dangerous, and the lack of an established habit. The vast majority of the public (86%) favored seat belt laws for front seat passengers, with 78% of these persons also supporting seat belt laws that applied to the back seat. Reported seat belt use was higher in standard (versus secondary) enforcement States, and higher for specific seating positions if persons believed that seating position was covered by the law. Blacks and Hispanics differed from whites and non-Hispanics both on questions regarding the perceived utility of seat belts, and their support for seat belt laws.</p> | | | | | |
| 17. Key Words Survey Occupant Protection Seat Belts | | | 18. Distribution Statement Document is available through the National Technical Information Service, Springfield, VA 22161 | | |
| 19. Security Classif. (of this report) Unclassified | | 20. Security Classif. (of this page) Unclassified | | 21. No. of Pages | 22. Price |

EXECUTIVE SUMMARY

The 1998 Motor Vehicle Occupant Safety Survey (MVOSS) was the third in a series of biennial national telephone surveys on occupant protection issues conducted for the National Highway Traffic Safety Administration (NHTSA). Data collection was conducted by the firm Schulman, Ronca, & Bucuvalas, Inc. (SRBI), a national survey research organization. The survey employed two questionnaires, each administered to a randomly selected national sample of approximately 4,000 persons age 16 and older (with younger ages oversampled). Interviewing began November 5, 1998 and ended January 12, 1999.

This report presents the survey findings pertaining to seat belts. The data are weighted to yield national estimates. Readers are cautioned that some subgroup analyses are based on small numbers of cases. Technical information on confidence intervals is presented in Appendix A so that readers may judge the precision of sample estimates. A full description of the methodology, and the questionnaires, are presented in a separate report.

Seat Belt Use

- **Motor Vehicle Use.** Over 90% of persons age 16 and older drove a motor vehicle. Certain demographic groups had far higher percentages of non-drivers than the national average, such as blacks (21%), Hispanics (23%), and persons in low income households (24% in households under \$15,000).
- **Vehicle Type.** Cars continued to drop as a percentage of the vehicle fleet, although they still accounted for 65% of all primary vehicles driven (versus 67% in 1996 and 71% in 1994). Pickup trucks (16%) and vans/minivans (10%) followed next in frequency.
- **Type Of Belt.** Three-quarters (75%) of primary vehicles had one-piece manual lap and shoulder belts in the front seat. In vehicles having a shoulder belt, 43% had adjustable shoulder belts. While some persons (39%) said that they had never tried to adjust their adjustable shoulder belt, those that did tended to say that they were able to make the belt more comfortable (91%).
- **Reported Belt Use.** More than three-quarters (79%) of drivers said that they used their seat belt “all of the time” while driving. Ten percent of these “all the time” users immediately stated on a follow-up question that they had not worn their seat belt while driving at some time during the past day or week. Twelve percent of drivers said they used their seat belt “most of the time” while driving. More than 70% of these “most of the time” users said on the follow-up question that they had not worn their seat belt while driving at some time in the past day or week.

- **Reported Compared To Observed Belt Use.** A revised self-report belt use measure, which subtracted drivers who said they had not worn their seat belt recently from the “all the time” user group, almost exactly matched the seat belt use rates obtained in a NHTSA national observation survey conducted at about the same time as the telephone survey.
- **Reported Belt Use By Seat Belt System.** Among those seat belt systems not having an automatic component, reported “all the time” use was lowest among lap only systems (61%) and highest among one-piece lap and shoulder systems (80%). Among two-piece belt systems, drivers were much more likely to use their lap belt “all the time” if the shoulder belt was manual (88%) rather than automatic (62%).
- **Reported Belt Use By Demographics.** Reported “all the time” use by drivers tended to be lower among males (74%), low income households (74% in households under \$15,000), pickup truck drivers (65%), and persons in the heaviest weight quartile (67% for males; 77% for females). Proportionally fewer blacks (75%) than whites (79%) reported wearing seat belts “all the time” while Hispanics (85%) were more likely than non-Hispanics (79%) to report “all the time” use. Non-use of seat belts also tended to be more frequent among persons who engaged in riskier behavior regarding alcohol use and speeding.
- **Reported Change In Belt Use In Past Year.** When asked if their seat belt use had changed in the past 12 months, 15% of drivers said it had increased. Most often, the drivers said they increased their usage because they became more aware of safety issues (53%), the seat belt law (25%), encouragement from others (23%), and not wanting a ticket (22%).
- **Seat Belt Use On The Job.** About one-third of drivers (34%) said they at least sometimes drove a motor vehicle as part of a job or business, usually either almost every day (56%) or a few days a week (26%). Less than half of these drivers (48%) reported that their company had a policy requiring seat belt use when driving on the job. Drivers were more likely to report higher seat belt use on the job compared to personal driving if they thought their company had a seat belt policy (31% versus 16%). For driving in general (among drivers who at least on occasion drove on the job), the percentage of drivers who reported wearing seat belts “all of the time” was higher among those who thought their company had a seat belt policy than those who did not (80% versus 70%).
- **Seat Belt Use By Seating Position.** Reported seat belt use was lower in the front and back passenger seating positions compared to the driver seating position. Whereas 79% of drivers answered that they used their seat belt “all of the time” while driving, the comparable figure was 74% in the front passenger seating position and only 43% in the back seat passenger position.

- **Individuals' Consistency In Wearing Seat Belts Across Seating Positions.** People were fairly consistent in their reported seat belt use as drivers and front seat passengers. However, even those who normally wore seat belts in the front seat were less inclined to wear their seat belts in the back. Only 53% of persons who said they always wore seat belts while driving also said they always wore them as back seat passengers.

Reasons For Seat Belt Use And Non-Use

- **Reasons For Use.** Injury avoidance was the most frequent reason given by drivers for wearing seat belts regardless of the group to which persons belonged. However, infrequent seat belt users (77%) less often gave this as a reason than did frequent seat belt users (97%).
- **Most Important Reason For Use.** When asked which was their most important reason for wearing seat belts, two-thirds of drivers (66%) said it was injury avoidance. Following in the distance were the law (7%), habit (6%), and wanting to set a good example (5%). Infrequent users of seat belts (46%) were less likely than frequent users (68%) to cite injury avoidance as their primary reason for seat belt use, although it still was the most common reason given.
- **Most Important Reason By Race/Ethnicity.** Blacks (55%) were less likely than whites (68%) or Hispanics (65%) to consider injury avoidance their primary reason for seat belt use. In addition, blacks (14%) and Hispanics (13%) were more likely than whites (6%) or non-Hispanics (7%) to cite the law as their major reason for seat belt use.
- **Most Important Reason By Education.** The more years of formal schooling that persons had, the more likely they attributed their seat belt use primarily to injury avoidance. They were less likely than persons with fewer years of schooling to identify the law as their main reason for seat belt use.
- **Reasons For Non-Use.** Among drivers who at least on occasion did not use their seat belt, the most frequent reasons for non-use were that they were only driving a short distance (56%) or they forgot (53%). When asked which reason for non-use was most important, forgetting (24%) ranked first and "short distance" (22%) second.
- **Differing Reasons For Non-Use Between Part Time Users And Non-Users.** Few persons said they never wore their seat belt. However, non-users' reasons for non-use differed sharply from part time users. Among part time users, the most important reasons for non-use usually related to risk perception (going only a short distance; forgetting). For non-users, their primary reasons for non-use revolved around discomfort and "other" considerations such as issues of personal freedom, concern about seat belts being dangerous, and the lack of an established habit.

- **Annoyances From Seat Belts.** All drivers, whether or not they wore seat belts regularly, were asked if there was anything they particularly disliked or found annoying about wearing them. More than one-third (36%) answered “yes,” with females (42%) more likely to respond affirmatively than males (31%). Annoyance was also more prevalent among drivers who lacked an adjustable shoulder belt (40%) than those who had one (32%). The most common complaint about seat belts involved pressure or pain on various parts of the body (53%). Females who were annoyed by seat belts particularly expressed this type of discomfort (62%), especially being choked by the seat belt (47%).
- **Awareness Of USDOT Public Service Advertisement Campaign.** Advertisements about seat belt use in which Vince and Larry, the crash dummies, were the central characters have been an important part of the U.S. Department of Transportation’s efforts to encourage the public to “buckle up.” More than eight-in-ten persons (83%) recalled seeing or hearing ads that used crash dummies. Among those who had seen the ads, 70% recalled that the message was to wear seat belts. This equated to 58% of the population age 16 and older who remembered the crash dummy ads and also recalled that the ads promoted seat belt use.

Attitudes Concerning The Utility Of Seat Belts, Risk Perception, And Fatalism

- **Would Want Seat Belt On In Crash.** The vast majority of the public age 16 and older either strongly (86%) or somewhat (8%) agreed with the statement “If I were in an accident, I would want to have my seat belt on.” As reported seat belt use increased, so did agreement with the statement.
- **Perceived Harm From Seat Belts.** More than one-third of the public (38%) either strongly (15%) or somewhat (23%) agreed with the statement “Seat belts are just as likely to harm you as help you.” As reported seat belt use decreased, agreement with the statement increased.
- **Impact On Medical Insurance Costs.** Two-thirds of the public (68%) either strongly (42%) or somewhat (26%) agreed that “Medical insurance costs would be lower if more people wore seat belts.” Agreement was highest among those who used their seat belt “all the time” (72%).
- **Anxiety From Seat Belts.** Relatively few people (15%) strongly (8%) or somewhat (7%) agreed that “Putting on a seat belt makes me worry more about being in an accident.” Agreement with this statement was expressed more often by persons who only sometimes (24%) or rarely/never (29%) wore their seat belt.
- **Seriousness Of Crashes Close To Home.** Even fewer people (12%) strongly (6%) or somewhat (6%) agreed “An accident close to home is usually not as serious as an accident farther away.” This item did not appear to be related to the level of reported seat belt use.

- **Pressure From Group Norms.** Almost one-in-five persons (18%) either strongly (10%) or somewhat (7%) agreed that “I would feel self-conscious around my friends if I wore a seat belt and they did not.” This item did not appear to be related to the level of reported seat belt use.
- **Parental Influence On Seat Belt Use.** Among persons ages 16-24, 63% either strongly (46%) or somewhat (17%) agreed that “I have a habit of wearing a seat belt because my parents insisted I wear them when I was a child.” The number dropped to 36% among persons ages 25-34, and 23% among those ages 35-44, reflecting the lower belt use rates during their childhood years.
- **Fatalism And Seat Belt Use.** The fatalistic belief that wearing seat belts did not matter because “if it is your time to die, you’ll die” was more prevalent among drivers who reported lower levels of seat belt usage: 22% among “all the time” users, 35% among “most of the time” users, 52% among “some of the time” users, and 61% among those who rarely or never wore seat belts.
- **Differences In Attitudes By Age.** Persons ages 16-20 differed from those ages 21-64 or 65 and older on whether they agreed with the risk perception and belt utility statements. This youngest age group was more likely than the others to believe that seat belts were as likely to harm as help (48%), that an accident close to home was usually not as serious (22%), that they would feel self-conscious about wearing seat belts if their friends did not (24%), and that insurance costs would be lower if more persons wore seat belts (82%).
- **Differences In Attitudes By Race/Ethnicity.** Blacks and Hispanics differed markedly from whites and non-Hispanics regarding risk perception and the perceived utility of seat belts. While 35% of whites and 37% of non-Hispanics agreed that seat belts were as likely to harm as help, about half of blacks (49%) and Hispanics (51%) agreed. Blacks (25%) and Hispanics (27%) were also about twice as likely as whites (11%) and non-Hispanics (13%) to agree that putting on a seat belt made them worry more about being in a crash, and that a crash close to home would not be as serious as one farther away (20% of blacks; 26% of Hispanics; 9% of whites; 11% non-Hispanics). Hispanics (44%) were far more likely than the other groups to say they would feel self-conscious about using seat belts if their friends were not wearing them. Blacks (40%) were most likely to agree with the fatalistic statement that wearing a seat belt did not matter because if it was your time to die, you’ll die.
- **Differences In Attitudes By Education.** Education level also showed a relationship to the various belt utility and risk perception attitudes. Generally, persons tended to be less fatalistic, less ambivalent about the injury reduction benefits of seat belts, and less self-conscious about going against group norms of non-use if they had more years of formal schooling.

- **Know Of Seat Belts That Have Broken Apart.** About one-in-twelve persons (8.5%) reported that a seat belt had broken apart when they or someone they knew was using it. The figure ranged from 6.5% in the Northeast to 10.1% in the West.

Attitudes, Knowledge, And Experience With Seat Belt Laws And Their Enforcement

- **Support For Front Seat Laws.** The vast majority of the public (86%) favored seat belt laws for front seat passengers either “a lot” (67%) or “some” (19%). More females (91%) than males (80%) voiced support for front seat belt laws. Blacks (94%) and Hispanics (95%) were more likely to express support than whites (84%) and non-Hispanics (85%).
- **Support For Back Seat Laws.** Among persons who supported front seat belt laws, 78% also supported applying seat belt laws to back seat adult passengers, equating to 67% of the total population age 16 and older who supported both front and back seat coverage by the law.
- **Support For Fines/Points.** About three-fifths (61%) of the population age 16 and older supported fines for drivers who did not wear seat belts. About half that many (30%) supported points against the license as a penalty. Support for these sanctions was greater among females than males, and greater among blacks and Hispanics than whites and non-Hispanics.
- **Preferred Amount Of Fine.** Among persons who supported fines, 47% favored a fine under \$50 (or no fine at all) if it was a first time violation. For repeat violations, 18% supported fines under \$50 while 41% favored fines of \$100 or more.
- **Knowledge Of Who Is Covered By The Law.** Almost everyone (94%) believed their State had a law requiring seat belt use. They most often thought the law covered drivers (93%), children in the front (86%), and adult passengers in the front (85%). Many thought the law also covered children in the back (76%). Fewer than half (42%) assumed that adults were required to wear seat belts in the back seat.
- **Reported Seat Belt Use If Seating Position Was Believed To Be Covered By The Law.** If persons believed that a specific seating position was covered by the law, then they were more likely to report that they wore their seat belt “all the time” when in that seating position. The difference was greatest for the rear seating position. Among those who thought their State law covered the back seat, 52% said they used their seat belt “all the time” when riding in the back. Absent that knowledge, only 37% answered that they wore their seat belt “all the time” when riding in the back seat.

- **Enforcement Provisions At Time Of Survey.** Seat belt laws contain either standard enforcement provisions (i.e., law enforcement officers can stop a vehicle on the basis of observing a seat belt violation) or secondary enforcement provisions (i.e., some other violation must be observed before stopping a vehicle). At the time of the survey, 14 States plus the District of Columbia had standard enforcement laws, 35 States had secondary enforcement laws, and 1 State did not have a seat belt law applicable to adults.
- **Awareness Of (Standard/Secondary) Enforcement Provisions In Their State.** Among those (94%) who believed their State had a seat belt law, 58% thought the law permitted standard enforcement (which equated to 55% of the total population). About three-fourths (74%) of the total population in standard enforcement States believed their State had a seat belt law that included standard enforcement provisions. In secondary enforcement States, there were more persons who believed their State had a standard enforcement seat belt law (41%) than thought their State had a seat belt law with secondary enforcement provisions (36%).
- **Enforcement Provisions And Reported Seat Belt Use.** Drivers were more likely to report that they wore their seat belt “all of the time” while driving if they resided in States having standard enforcement provisions (85%), as opposed to secondary enforcement provisions (75%). The difference in “all of the time” use was similar when comparing drivers who believed their State seat belt law permitted standard enforcement (82%) to those who believed their State law called for secondary enforcement (74%).
- **Support For Standard Enforcement.** Overall, 58% of the population believed that police should be allowed to stop a vehicle if they observed a seat belt violation when no other traffic laws were being broken, an increase from 52% in 1996. Support was greater among females (63%), blacks (61%), and Hispanics (73%).
- **Stopped By Police In Past Year For Traffic-Related Reason.** About one-in-six (17.0%) drivers said they had been stopped by police for a traffic-related reason in the past year, more often males (20.4%) than females (13.6%). A higher percentage of blacks (19.0%) than whites (16.5%) said they had been stopped, as did a higher percentage of Hispanics (21.2%) than non-Hispanics (16.7%), though the numbers of black and Hispanic drivers asked the question were too few for the differences to be statistically significant. Traffic-related stops peaked at ages 21-24 (35%), and then steadily declined across subsequent age groups. Drivers usually said they were wearing seat belts when stopped (81%). Three-fifths (60%) of all drivers stopped by the police received some type of traffic ticket.
- **Previously Received A Ticket/Warning For A Seat Belt Violation.** About 12% (11.6%) of the population age 16 and older had received a ticket and/or warning some time in the past for violating seat belt laws. Specifically, 6.1% had received a ticket only, 1.5% had received both a ticket and a warning, and 4.0% had received only a warning. In

States with standard enforcement provisions, 13.3% had received a ticket and/or warning, compared to 10.5% in secondary enforcement States.

- **Impact Of Seat Belt Ticket.** When asked if their frequency of seat belt use had changed after receiving the seat belt ticket or warning, 56% said they started using their seat belt more often. However, the current level of belt use reported by drivers who had received a ticket or warning was well below that of drivers who had received neither form of censure.
- **Perceived Risk Of Personally Being Ticketed.** A minority (39%) of drivers considered it very (18%) or somewhat (21%) likely that they would receive a ticket if they did not wear their seat belt at all while driving over the next six months. The perceived risk of being ticketed was higher among drivers who previously had received a ticket or warning, and in standard enforcement States. It also was higher among drivers who tended to wear their seat belt more often. Among demographic groups, Hispanics were especially likely to consider receiving a ticket very or somewhat likely (56%) if they didn't wear a seat belt over six months.
- **Perceived Emphasis On Ticketing For Seat Belt Violations By Local Police.** The public was more likely to agree (44%) than disagree (32%) with the statement "Police in my community generally do not bother to write tickets for seat belt violations." Many people (23%) said they did not know. Agreement was more likely in secondary enforcement (48%) than standard enforcement (38%) States.
- **Preferred Level Of Enforcement Activity.** When asked to rate on a 10-point scale how strictly they believed the police should enforce seat belt laws, the public's response was mixed. They most often picked a value of "10" (26%) which meant "police should give tickets at every opportunity," although responses also clustered at the middle and low end of the scale. The average score was 6.0, but higher among females (6.5) than males (5.6), blacks (6.3) than whites (5.8), and Hispanics (7.1) than non-Hispanics (5.9).

Comparison To Prior Year Motor Vehicle Occupant Safety Surveys

- **Reported Frequency Of Driver Seat Belt Use.** Reported seat belt use among drivers increased from 74% in 1994 to 76% in 1996 to 79% in 1998.
- **Reported Change In Driver Seat Belt Use.** The percentage of drivers who said that their seat belt use had increased in the past year has declined over time. In 1994, 27% of drivers reported that they had increased their use of seat belts in the past year. This figure fell to 21% in 1996, and then 15% in 1998.
- **Reported Frequency Of Seat Belt Use As Front/Rear Seat Passengers.** Among persons who usually sat in the front seat as passengers, reported "all the time" seat belt use in that seating position increased from 69% in 1994 to 73% in 1996 and 74% in 1998.

Among persons who usually sat in the back seat as passengers, reported “all the time” seat belt use in that seating position increased from 41% in both 1994 and 1996 to 46% in 1998.

- **Seat Belt Policies On The Job.** The percentage of drivers who said that they drove a vehicle as part of a job or business was 34% in 1998 compared to 36% in both 1996 and 1994. Of these drivers, fewer than half (48%) reported in 1998 that their company had a policy requiring seat belt use when driving on the job compared to 53% in 1996 and 52% in 1994.
- **Annoyed By Seat Belt.** The percentage of drivers who said there was something they particularly disliked or found annoying about seat belts declined from 40% in 1994 to 38% in 1996 to 36% in 1998.
- **Support For Seat Belt Laws Covering The Driver And Front Seat Passengers.** In 1998, two-thirds (67%) of the public strongly favored laws that required drivers and front seat passengers to wear seat belts. This was slightly higher than in 1996 (63%) and 1994 (64%).
- **Support For Standard Enforcement.** Support for standard enforcement provisions for seat belt laws increased from 52% of the total population in 1996 to 58% in 1998. This question was not asked in 1994.
- **Perceived Risk Of Personally Being Ticketed.** In 1998, more drivers (18%) than in the previous surveys (13% in 1996 and 15% in 1994) believed that they were very likely to receive a seat belt ticket if they did not wear a seat belt at all while driving over the next six months. In total, 39% of drivers in 1998 expressed some level of agreement that they would be ticketed compared to 33% in 1996 and 37% in 1994.

TABLE OF CONTENTS

| | |
|--|------|
| FIGURES AND TABLES | xvii |
| INTRODUCTION | xxv |
| Background | xxv |
| Methodology | xxv |
| CHAPTER 1 SEAT BELT USE | 1 |
| Drivers and Vehicles | 2 |
| Adjustable Shoulder Belt | 8 |
| Drivers' Use of Seat Belts | 10 |
| Group Differences In Reported Seat Belt Use | 13 |
| Relating Seat Belt Use To Other (Problem) Behaviors | 17 |
| Comparing Reported To Observed Seat Belt Use | 20 |
| Clarifying Reported Usage | 21 |
| Revised Comparison of Reported To Observed Seat Belt Use | 23 |
| Reported Changes In Belt Use | 24 |
| Regional Differences | 25 |
| Demographic Differences | 26 |
| Reasons For Change | 28 |
| Company Seat Belt Policy | 29 |
| Company Enforcement of Seat Belt Policy | 31 |
| Seat Belt Use At Work and Company Policy | 34 |
| Passenger Use of Seat Belts | 38 |
| CHAPTER 2 REASONS FOR SEAT BELT USE AND NON-USE | 47 |
| Reasons For Seat Belt Use | 48 |
| Most Important Reason For Seat Belt Use | 53 |
| Reasons For Non-Use Of Seat Belts | 58 |
| Most Important Reason For Non-Use Of Seat Belts | 63 |
| What Drivers Dislike Or Find Annoying About Seat Belts | 69 |
| Reasons For Seat Belt Use By Non-Drivers | 76 |
| Non-Drivers' Reasons For Not Using Seat Belts | 78 |
| Vince and Larry, The Crash Dummies | 81 |
| CHAPTER 3 ATTITUDES CONCERNING THE UTILITY OF SEAT BELTS, RISK PERCEPTION, AND FATALISM | 83 |
| Introduction Of New Survey Section On Attitudes Concerning Seat Belts | 84 |
| Attitudes Concerning Risk Perception And The Utility Of Seat Belts | 85 |

| | |
|---|------------|
| Attitudes Concerning Parental Influence On Seat Belt Use | 97 |
| Attitudes Toward Fatalism | 100 |
| Sex And Age Differences In Attitudes | 102 |
| Racial And Ethnic Differences In Attitudes | 104 |
| Differences In Attitudes By Educational Level | 106 |
| Experience With Seat Belt Failures | 108 |
| | |
| CHAPTER 4 ATTITUDES, KNOWLEDGE, AND EXPERIENCE WITH SEAT BELT LAWS AND THEIR ENFORCEMENT | 111 |
| Attitudes Toward Seat Belt Laws | 112 |
| Attitudes Toward Enforcement Of Seat Belt Laws | 119 |
| Knowledge Of State Seat Belt Laws | 126 |
| Standard or Secondary Enforcement Provisions Of Seat Belt Laws | 134 |
| Stopped For Traffic-Related Reason In Past Year | 143 |
| Beliefs About Power Of Law Enforcement To Stop Vehicles | 149 |
| Ever Received Ticket Or Warning For Seat Belt Violation | 151 |
| Perceived Risk Of Being Ticketed For Non-Use Of Seat Belts | 156 |
| Preferred Level Of Enforcement | 165 |
| | |
| CHAPTER 5 1994-1998 TRENDS | 169 |
| Drivers and Vehicles, 1994-1998 | 170 |
| Type of Driver-Side Seat Belts, 1994-1998 | 171 |
| Driver's Use of Seat Belts, 1994-1998 | 172 |
| Reported Changes in Driver Seat Belt Use, 1994-1998 | 174 |
| Driving On The Job, 1994-1998 | 175 |
| Company Seat Belt Policy, 1994-1998 | 176 |
| Frequency Of Front Seat Passenger Seat Belt Use, 1994-1998 | 177 |
| Frequency Of Back Seat Passenger Seat Belt Use, 1994-1998 | 178 |
| Most Important Reason For Seat Belt Use By Drivers, 1994-1998 | 179 |
| Most Important Reason For Non-Use Of Seat Belts By Drivers, 1994-1998 | 180 |
| Drivers Who Dislike Or Find Something Annoying About Seat Belts, 1994-1998 | 181 |
| Advertising Awareness, The Crash Dummies, 1994-1998 | 182 |
| Support For Seat Belt Laws That Apply To The Front Seat, 1994-1998 | 183 |
| Support For Seat Belt Laws That Apply To <u>Both</u> The Front And Back Seats, 1994-1998 | 184 |
| Support For Fines And Points, 1994-1998 | 185 |
| Likely Reaction To Receiving Seat Belt Ticket, 1994-1998 | 186 |
| Believe Their State Has A Seat Belt Law, 1994-1998 | 187 |
| Knowledge of Standard Versus Secondary Enforcement, 1994-1998 | 188 |
| Support For Standard Enforcement, 1996-1998 | 189 |
| Ever Received A Seat Belt Ticket Or Warning, 1994-1998 | 190 |
| Perceived Likelihood Of Being Ticketed, 1994-1998 | 191 |
| Level Of Support For Enforcing Seat Belt Laws, 1994-1998 | 192 |

APPENDIX A PRECISION OF SAMPLE ESTIMATES

APPENDIX B STATE HIGHWAY SAFETY LAWS AT TIME OF SURVEY

FIGURES AND TABLES

CHAPTER 1: 1998 SEAT BELT USE

Figures

| | |
|--|----|
| Figure 1. Driving Frequency | 2 |
| Figure 2. Primary Vehicle Driven | 4 |
| Figure 3. Have Adjustable Shoulder Belt | 8 |
| Figure 4. Effectiveness Of Adjustable Shoulder Belts | 9 |
| Figure 5. Reported Frequency Of Driver Seat Belt Use | 10 |
| Figure 6. Frequency Of Driver Seat Belt Use: Belts Not Having Automatic Components | 11 |
| Figure 7. Frequency Of Driver Lap Belt Use: If Shoulder Belt Used All The Time | 12 |
| Figure 8. Reported Change In The Use Of Seat Belts By Drivers | 24 |
| Figure 9. Causes Of Increased Belt Use | 28 |
| Figure 10. Frequency Drive Vehicle As Part Of Job Or Business | 29 |
| Figure 11. Presence Of Company Seat Belt Policy | 30 |
| Figure 12. Enforcement Of Company Seat Belt Policy | 31 |
| Figure 13. Likelihood Of Wearing Seat Belt: Work Compared To Personal Driving | 34 |
| Figure 14. Causes Of Increased Belt Use When Driving On The Job | 35 |
| Figure 15. Drivers' Job Vs. Personal Seat Belt Use By Presence Of Company Policy | 36 |
| Figure 16. Drivers' General Seat Belt Use By Presence Of Company Policy | 37 |
| Figure 17. Frequency Ride As Passenger | 38 |
| Figure 18. Usually Rides In Front Or Back Seat | 39 |
| Figure 19. Reported Frequency Of Seat Belt Use As Passenger In Front Seat | 40 |
| Figure 20. Reported Frequency Of Seat Belt Use As Passenger In Back Seat | 42 |

Tables

| | |
|--|----|
| Table 1. Driving Frequency By Demographic Characteristics | 3 |
| Table 2. Seat Belt Configuration By Type Of Primary Vehicle | 5 |
| Table 3. Type Of Driver Seat Belt In Primary Vehicle | 6 |
| Table 4. Driver Seat Belt Use By Demographic And Other Characteristics | 14 |
| Table 5. Driver Seat Belt Use By Alcohol Use | 18 |
| Table 6. Driver Seat Belt Use By Driving Speed | 19 |
| Table 7. Reported Seat Belt Use Compared To Observed Use By Drivers | 20 |
| Table 8. Last Time Drivers Did Not Wear Seat Belt By Frequency Of Reported Seat Belt Use | 21 |
| Table 9. Revised Reported Seat Belt Use Compared To Observed Use By Drivers | 23 |
| Table 10. Patterns Of Reported Driver Seat Belt Use By NHTSA Region | 25 |
| Table 11. Reported Change In Driver's Use Of Seat Belts In The Past Year By Demographic Characteristics | 27 |
| Table 12. How Employer Enforces Seat Belt Policy | 32 |

| | |
|---|----|
| Table 13. Frequency Wear Seat Belt As Front Seat Passenger By Where Usually Ride As Passenger | 41 |
| Table 14. Frequency Wear Seat Belt As Back Seat Passenger By Where Usually Ride As Passenger | 43 |
| Table 15. Frequency Of Seat Belt Use As Driver By Frequency Of Seat Belt Use As Front Seat Passenger | 44 |
| Table 16. Frequency Of Seat Belt Use As Driver By Frequency Of Seat Belt Use As Back Seat Passenger | 45 |

CHAPTER 2: REASONS FOR SEAT BELT USE AND NON-USE

Figures

| | |
|--|----|
| Figure 21. Reasons For Seat Belt Use - Drivers | 48 |
| Figure 22. Driver Reasons For Seat Belt Use By Reported Level Of Seat Belt Use | 49 |
| Figure 23. Most Important Reason For Seat Belt Use - Drivers | 53 |
| Figure 24. Most Important Reason For Driver Seat Belt Use By Reported Level Of Seat Belt Use | 54 |
| Figure 25. Reasons For Non-Use Of Seat Belts - Drivers | 58 |
| Figure 26. Reasons For Non-Use Of Seat Belts: Non-Users Versus Part Time Users | 59 |
| Figure 27. Most Important Reason For Non-Use Of Seat Belts - Drivers | 63 |
| Figure 28. Most Important Reason For Non-Use Of Seat Belts: Non-Users Versus Part Time Users | 64 |
| Figure 29. Dislike Or Find Seat Belts Annoying: Drivers | 69 |
| Figure 30. Dislike Or Find Seat Belts Annoying By Reported Belt Use: Drivers | 70 |
| Figure 31. Dislike Or Find Seat Belts Annoying By Sex | 71 |
| Figure 32. Dislike Or Find Seat Belts Annoying By Weight | 72 |
| Figure 33. Dislike Or Find Seat Belts Annoying By Presence Of Adjustable Shoulder Belt In Primary Vehicle | 73 |
| Figure 34. Reasons For Seat Belt Use: Non-Drivers Versus Drivers | 76 |
| Figure 35. Most Important Reason For Seat Belt Use: Non-Drivers Versus Drivers | 77 |
| Figure 36. Reasons For Not Wearing A Seat Belt: Non-Drivers Versus Drivers | 79 |
| Figure 37. Most Important Reason For Not Wearing A Seat Belt: Non-Drivers Versus Drivers | 80 |
| Figure 38. Awareness Of Crash Dummy Ads: General Public | 81 |
| Figure 39. Seen/Heard Ad And Recall Belt Message By Age | 82 |

Tables

| | |
|---|----|
| Table 17. Driver Reasons For Seat Belt Use By Sex And Age | 50 |
| Table 18. Driver Reasons For Seat Belt Use By Race And Ethnicity | 51 |
| Table 19. Driver Reasons For Seat Belt Use By Education | 52 |
| Table 20. Most Important Reason For Driver Seat Belt Use By Sex And Age | 55 |

| | |
|--|----|
| Table 21. Most Important Reason For Driver Seat Belt Use By Race And Ethnicity | 56 |
| Table 22. Most Important Reason For Driver Seat Belt Use By Education | 57 |
| Table 23. Driver Reasons For Non-Use Of Seat Belts By Sex And Age | 60 |
| Table 24. Driver Reasons For Non-Use Of Seat Belts By Race And Ethnicity | 61 |
| Table 25. Driver Reasons For Non-Use Of Seat Belts By Education | 62 |
| Table 26. Most Important Reason For Non-Use Of Seat Belts: Verbatim "Other" Reasons Reported By Non-Users | 65 |
| Table 27. Most Important Reason For Driver Non-Use Of Seat Belts By Sex And Age | 66 |
| Table 28. Most Important Reason For Driver Non-Use Of Seat Belts By Race And Ethnicity | 67 |
| Table 29. Most Important Reason For Driver Non-Use Of Seat Belts By Education | 68 |
| Table 30. What Drivers Dislike Or Find Annoying About Seat Belts | 74 |

**CHAPTER 3: ATTITUDES CONCERNING THE UTILITY OF SEAT BELTS,
RISK PERCEPTION, AND FATALISM**

Figures

| | |
|---|-----|
| Figure 40. If I Were In An Accident I Would Want To Have My Seat Belt On | 85 |
| Figure 41. Would Want Seat Belt On In Accident By Frequency Of Driver Seat Belt Use | 86 |
| Figure 42. Seat Belts Are Just As Likely To Harm You As Help You | 87 |
| Figure 43. Seat Belts Are Just As Likely To Harm As Help By Frequency Of Driver Seat Belt Use | 88 |
| Figure 44. Medical Insurance Costs Would Be Lower If More People Wore Seat Belts | 89 |
| Figure 45. Medical Insurance Costs Would Be Lower By Frequency Of Driver Seat Belt Use | 90 |
| Figure 46. Putting On A Seat Belt Makes Me Worry More About Being In An Accident | 91 |
| Figure 47. Putting On A Seat Belt Makes Me Worry More By Frequency Of Driver Seat Belt Use | 92 |
| Figure 48. An Accident Close To Home Is Usually Not As Serious As An Accident Further Away | 93 |
| Figure 49. Accidents Close To Home Are Less Serious By Frequency Of Driver Seat Belt Use | 94 |
| Figure 50. I Would Feel Self-Conscious Around My Friends If I Wore A Seat Belt And They Did Not | 95 |
| Figure 51. I Would Feel Self-Conscious Around My Friends By Frequency Of Driver Seat Belt Use | 96 |
| Figure 52. If Parents Don't Wear Belts But Insist Children Use Them, The Children Will Almost Always Use Seat Belts As Adults | 97 |
| Figure 53. If Parents Don't Wear Belts But Insist Their Children Do, The Children Will Almost Always Wear Belts As Adults By Frequency Of Driver Seat Belt Use | 98 |
| Figure 54. I Have A Habit Of Wearing A Seat Belt Because My Parents Insisted I Wear Them When I Was A Child By Age Group | 99 |
| Figure 55. Believe Wearing Seat Belt Matters By Driver Seat Belt Use | 100 |
| Figure 56. Believe Wearing Seat Belt Doesn't Matter By Driver Seat Belt Use | 101 |

| | |
|---|-----|
| Figure 57. Seat Belt Has Broken Apart When Respondent Or Someone Respondent Knows Was Using It | 108 |
| Figure 58. Reported Seat Belt Failures By Driver Seat Belt Use | 109 |

Tables

| | |
|---|-----|
| Table 31. Attitudes Concerning Risk Perception, Fatalism, And The Usefulness Of Seat Belts By Sex And Age | 102 |
| Table 32. Attitudes Concerning Risk Perception, Fatalism, And The Usefulness Of Seat Belts By Race And Ethnicity | 104 |
| Table 33. Attitudes Concerning Risk Perception, Fatalism, And The Usefulness Of Seat Belts By Education | 106 |

CHAPTER 4: ATTITUDES, KNOWLEDGE, AND EXPERIENCE WITH SEAT BELT LAWS AND THEIR ENFORCEMENT

Figures

| | |
|--|-----|
| Figure 59. Support For Front Seat Belt Laws | 112 |
| Figure 60. Favor Front Seat Belt Laws By Sex And Age | 113 |
| Figure 61. Favor Front Seat Belt Laws By Race And Ethnicity | 114 |
| Figure 62. Favor Front Seat Belt Laws By Drivers' Reported Seat Belt Use | 115 |
| Figure 63. Support For Seat Belt Laws That Apply To Back Seat Adult Passengers | 116 |
| Figure 64. Favor Seat Belt Laws For Adult Front And Back Seat Passengers By Sex, Race, And Ethnicity | 117 |
| Figure 65. Favor Seat Belt Laws For Adult Front And Back Seat Passengers By Age | 118 |
| Figure 66. Support For Fines And Points | 119 |
| Figure 67. Suggested Minimum Fine For Violation Of Seat Belt Law: Fine Supporters | 121 |
| Figure 68. Someone They Know Would Probably Or Definitely Wear Seat Belts More Often If Assessed The State Fine | 122 |
| Figure 69. Likely Reaction To Receiving Ticket For Seat Belt Violation | 123 |
| Figure 70. Deserve Seat Belt Ticket By Favor Or Oppose Front Seat Seat Belt Laws | 124 |
| Figure 71. Likely Reaction To Receiving Seat Belt Ticket By Sex, Race, And Ethnicity | 125 |
| Figure 72. Believe Their State Has A Law Requiring Seat Belt Use | 126 |
| Figure 73. Who Is Required To Wear Seat Belts According To State Law | 127 |
| Figure 74. Driver Reported Belt Use By Whether Driver Believes Law Covers Drivers | 128 |
| Figure 75. Adults' Reported Front Passenger Seat Belt Use By Whether Believe Law Covers That Position | 129 |
| Figure 76. Adults' Reported Back Passenger Seat Belt Use By Whether Believe Law Covers That Position | 130 |
| Figure 77. Beliefs About Which Adults Are Required To Wear Seat Belts | 131 |

| | |
|--|-----|
| Figure 78. Beliefs About Whether State Law Permits Standard Or Secondary Enforcement . . . | 134 |
| Figure 79. Knowledge Of Standard Versus Secondary Enforcement By Provisions Of State Law | 135 |
| Figure 80. Reported Seat Belt Use By Whether Driver Lives In Standard Or Secondary Enforcement State | 136 |
| Figure 81. Reported Seat Belt Use By Whether Driver Believes Law Allows Standard Or Secondary Enforcement | 137 |
| Figure 82. Support For Standard Enforcement By Whether State Allows It | 139 |
| Figure 83. Support For Standard Enforcement By Whether Respondent Thinks Law Is Standard Or Secondary | 141 |
| Figure 84. Reasons People Believe Seat Belt Violations Should Be Treated Differently From Other Violations | 142 |
| Figure 85. Drivers Stopped In Past Year By Police For Traffic-Related Reason By Sex, Race, And Ethnicity | 144 |
| Figure 86. Drivers Stopped In Past Year By Police For Traffic-Related Reason By Age | 145 |
| Figure 87. Drivers Stopped In Past Year For Traffic-Related Reason By Enforcement Provisions Of State Law | 146 |
| Figure 88. Whether Driver Was Wearing Seat Belt At Traffic Stop | 147 |
| Figure 89. Outcome Of Traffic Stop | 148 |
| Figure 90. If A Police Officer Wanted To Stop A Motor Vehicle, S/he Could Always Find A Legal Reason To Do So | 149 |
| Figure 91. Ever Received Ticket Or Warning For Seat Belt Violation | 151 |
| Figure 92. Ever Received Seat Belt Ticket Or Warning By Race And Ethnicity | 152 |
| Figure 93. Ever Received Seat Belt Ticket Or Warning By Enforcement Provisions Of State Law | 153 |
| Figure 94. Reported Change In Frequency Of Seat Belt Use After Receiving Seat Belt Ticket Or Warning | 154 |
| Figure 95. Driver “All The Time” Seat Belt Use By Whether Ever Received Seat Belt Ticket Or Warning | 155 |
| Figure 96. Likelihood Of Receiving A Seat Belt Ticket If Seat Belts Were Not Worn For Six Months | 156 |
| Figure 97. Perceived Risk Of Being Ticketed For Non-Use By Enforcement Provisions Of State Law | 158 |
| Figure 98. Perceived Risk Of Being Ticketed For Non-Use By Drivers’ Reported Frequency Of Seat Belt Use | 159 |
| Figure 99. Police In My Community Generally Do Not Bother To Write Tickets For Seat Belt Violations | 161 |
| Figure 100. Police In Community Do Not Bother To Write Belt Tickets By Enforcement Provisions Of State Law | 162 |
| Figure 101. Police In Community Do Not Bother To Write Seat Belt Tickets By Frequency Of Driver Seat Belt Use | 163 |
| Figure 102. Level Of Support For Enforcing Seat Belt Laws | 165 |
| Figure 103. Level Of Support For Enforcing Seat Belt Laws | |

| | |
|--|-----|
| By Enforcement Provisions Of State Law | 166 |
| Figure 104. Average Level Of Support For Enforcing Seat Belt Laws By Sex, Race, And Ethnicity | 167 |
| Figure 105. Average Level Of Support For Enforcing Seat Belt Laws By Age | 168 |

Tables

| | |
|--|-----|
| Table 34. Support For Fines And Points By Sex, Age, Race, And Ethnicity | 120 |
| Table 35. Beliefs About Who Is Required To Wear Seat Belts By Seating Positions Covered By State Law | 132 |
| Table 36. Self-Reported Seat Belt Use By Seating Positions Covered By State Law | 133 |
| Table 37. Attitudes Concerning Utility Of Seat Belts By Whether State Seat Belt Law Permits Standard Or Secondary Enforcement | 138 |
| Table 38. Support For Standard Enforcement By Sex, Age, Race, And Ethnicity | 140 |
| Table 39. "If A Police Officer Wanted To Stop A Motor Vehicle, That Officer Could Always Find A Legal Reason To Stop It" By Sex, Age, Race, And Ethnicity . | 150 |
| Table 40. Perceived Risk Of Being Ticketed By Whether Ever Received A Seat Belt Ticket Or Warning | 157 |
| Table 41. Perceived Risk Of Being Ticketed For Non-Use By Sex, Age, Race, And Ethnicity | 160 |
| Table 42. "Police In My Community Generally Do Not Bother To Write Tickets For Seat Belt Violations" By Sex, Age, Race, And Ethnicity | 164 |

CHAPTER 5: 1994-1998 TRENDS

Figures

| | |
|--|-----|
| Figure 106. Frequency Of Reported Driver Seat Belt Use, 1994-1998 | 172 |
| Figure 107. Last Time Did Not Wear Seat Belt By Drivers Who Said They Use Seat Belts All The Time | 173 |
| Figure 108. Reported Change In The Use Of Seat Belts Among Drivers, 1994-1998 | 174 |
| Figure 109. At Least Sometimes Drive A Vehicle As Part Of A Job Or Business, 1994-1998 . | 175 |
| Figure 110. Dislike Or Find Something Annoying About Seat Belts, 1994-1998 | 181 |
| Figure 111. Awareness Of Crash Dummy Ads: General Public, 1994-1998 | 182 |
| Figure 112. Support For Front Seat Seat Belt Laws, 1994-1998 | 183 |
| Figure 113. Support For Seat Belt Laws That Apply To Both The Front And Back Seats, 1994-1998 | 184 |
| Figure 114. Support For Fines And Points, 1994-1998 | 185 |
| Figure 115. Likely Reaction To Receiving Seat Belt Ticket, 1994-1998 | 186 |
| Figure 116. Believe Their State Has A Seat Belt Law, 1994-1998 | 187 |
| Figure 117. Believe State Law Is Standard Or Secondary, 1994-1998 | 188 |
| Figure 118. Support Standard Enforcement, 1996-1998 | 189 |
| Figure 119. Ever Received A Seat Belt Ticket Or Warning, 1994-1998 | 190 |
| Figure 120. Likelihood Of Being Ticketed If Don't Wear Seat Belt | |

| | |
|--|-----|
| While Driving Over Next 6 Months, 1994-1998 | 191 |
| Figure 121. On A 10-Point Scale, How Strictly Police Should Enforce Seat Belt Laws, 1994-1998 | 192 |

Tables

| | |
|---|-----|
| Table 43. Driving Frequency, 1994-1998 | 170 |
| Table 44. Type Of Primary Vehicle Driven, 1994-1998 | 170 |
| Table 45. Seat Belt Configuration In Front Seat Of Primary Vehicle, 1994-1998 | 171 |
| Table 46. Company Seat Belt Policy – Written Or Unwritten, 1994-1998 | 176 |
| Table 47. Frequency Wear Seat Belt As Front Seat Passenger For Those Who Usually Ride In The Front Seat, 1994-1998 | 177 |
| Table 48. Frequency Wear Seat Belt As Back Seat Passenger For Those Who Usually Ride In The Back Seat, 1994-1998 | 178 |
| Table 49. Most Important Reason For Seat Belt Use: Drivers, 1994-1998 | 179 |
| Table 50. Most Important Reason For Not Wearing A Seat Belt: Drivers, 1994-1998 | 180 |

Introduction

Background

The Motor Vehicle Occupant Safety Survey is conducted biennially for the National Highway Traffic Safety Administration (NHTSA). It is a national telephone survey composed of two questionnaires, each administered to approximately 4,000 randomly selected persons age 16 and older. The Version 1 Questionnaire emphasizes seat belt issues while Version 2 emphasizes child restraint issues. The questionnaires also contain smaller modules addressing such areas as air bags, motorcyclist and bicyclist helmet use, emergency medical services, and crash injury experience.

NHTSA conducted the first Motor Vehicle Occupant Safety Survey in 1994. Subsequent versions of the survey have included modest revisions to reflect changes in information needs. Thus the 1998 survey contained numerous items from the 1994 and 1996 surveys, which allows the agency to monitor change over time in knowledge, attitudes, and (reported) behavior related to motor vehicle occupant safety. The 1998 survey also included new questions dealing with such areas as seating position of children, attitudes about risk and the utility of seat belts, warning labels for air bags, and child injury prevention.

The following report presents findings from the 1998 Motor Vehicle Occupant Safety Survey pertaining to seat belts. Specifically, it explores the following areas: 1) 1998 seat belt use; 2) reasons for seat belt use and non-use; 3) attitudes concerning the utility of seat belts, and 4) attitudes, knowledge, and experience with seat belt laws and their enforcement. A fifth section examines trends between 1994 and 1998 on selected seat belt issues.

Methodology

The 1998 Motor Vehicle Occupant Safety Survey was conducted by Schulman, Ronca, & Bucuvalas, Inc. (SRBI), a national survey research organization. SRBI conducted a total of 8,215 telephone interviews among a national population sample. To reduce the burden on respondents, the survey employed two questionnaires. A total of 4,094 interviews were completed with Version 1 and 4,121 interviews were completed with Version 2. Although some questions appeared in both versions (e.g., demographics, crash injury experience, seat belt use), each questionnaire had its own set of distinct topics. Each sample was composed of approximately 4,000 persons age 16 and older, including oversamples of persons ages 16-39. The procedures used in the survey yielded national estimates of the target population within specified limits of expected sampling variability, from which valid generalizations can be made to the general public.

The survey was conducted from November 5, 1998 to January 12, 1999. This is approximately the same time period in which the 1994 and 1996 surveys were conducted. For a complete description of the methodology and sample disposition, including computation of weights, refer to the 1998 Motor Vehicle Occupant Safety Survey: Methodology Report. The report includes

English and Spanish language versions of the questionnaires.

The percentages presented in this report are weighted to reflect accurately the national population age 16 and older. Unweighted sample sizes (“N”s) are included so that readers know the exact number of respondents answering a given question, allowing them to estimate sampling precision (see Appendix A for related technical information).

Percentages for some items may not add to 100 percent due to rounding, or because the question allowed for more than one response. In addition, the number of cases involved in subgroup analyses may not sum to the grand total who responded to the primary questionnaire item being analyzed. Reasons for this include some form of nonresponse on the grouping variable (e.g., “Don’t Know” or Refused), or use of only selected subgroups in the analysis. Moreover, if one of the variables involved in the subgroup analysis appeared on both versions of the questionnaire but the other(s) appeared on only one questionnaire, then the subgroup analysis was restricted to data from only one version of the questionnaire.

The survey employed two questions to categorize cases for subgroup analyses involving race and ethnicity. The first asked respondents if they considered themselves to be Hispanic or Latino. Those who said “Yes” composed the Hispanic analytic subgroup in the study, those who said “No” composed a non-Hispanic comparison group. The second question was treated independently of the ethnicity question, i.e., it was asked of every respondent. The interviewers recited several different racial categories, and asked respondents which categories described them. Respondents could select more than one. For purposes of analysis, a respondent was assigned to a specific racial category if s/he selected only that category. The few respondents who selected multiple categories (fewer than 200 out of more than 8200 cases) were analyzed as a separate multi-racial group. Because race and ethnicity were considered independently, each racial group could include both Hispanics and non-Hispanics, and the Hispanic analytic subgroup included both blacks and whites.

1998 SURVEY RESULTS

CHAPTER 1

SEAT BELT USE

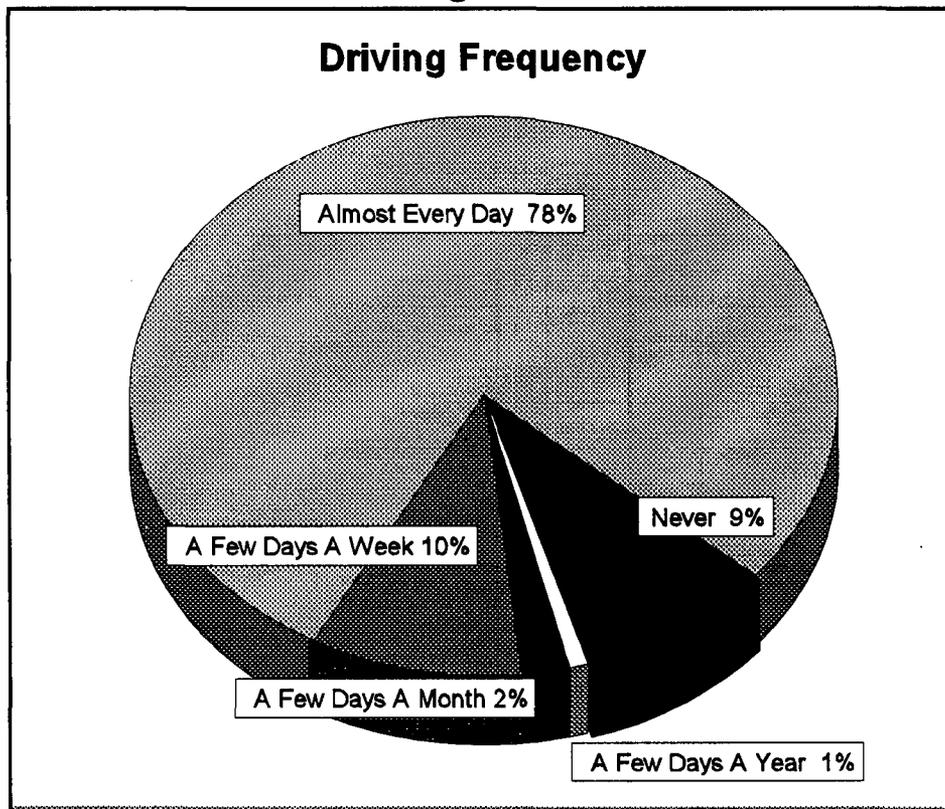
1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Prior to collecting detailed information on seat belt use, the survey asked respondents if they were drivers, and if so, what type of vehicle they most often drove. Questions about the seat belt configuration in that vehicle followed. Only then did the survey query respondents about their seat belt use, defining it as usage **while driving their usual vehicle**. Thus the flow of questioning was designed to provide focus to the respondents when defining their belt use behavior.

Drivers and Vehicles

More than nine out of ten persons age 16 and older drive a motor vehicle. Almost eight out of ten do so almost every day.

Figure 1



Qx: How often do you drive a motor vehicle?

Base: Total population age 16+.

Unweighted N=8215

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

There were proportionally fewer drivers among the youngest and oldest age groups, racial and ethnic minorities (see page xxvi for group definitions), females, and low income households. The survey found little difference according to urbanicity, as 78% of urban residents, 78% of suburban residents, and 79% of rural residents reported driving almost every day.

TABLE 1
Driving Frequency By Demographic Characteristics

Qx: How often do you drive a motor vehicle?

Base: Total population age 16+

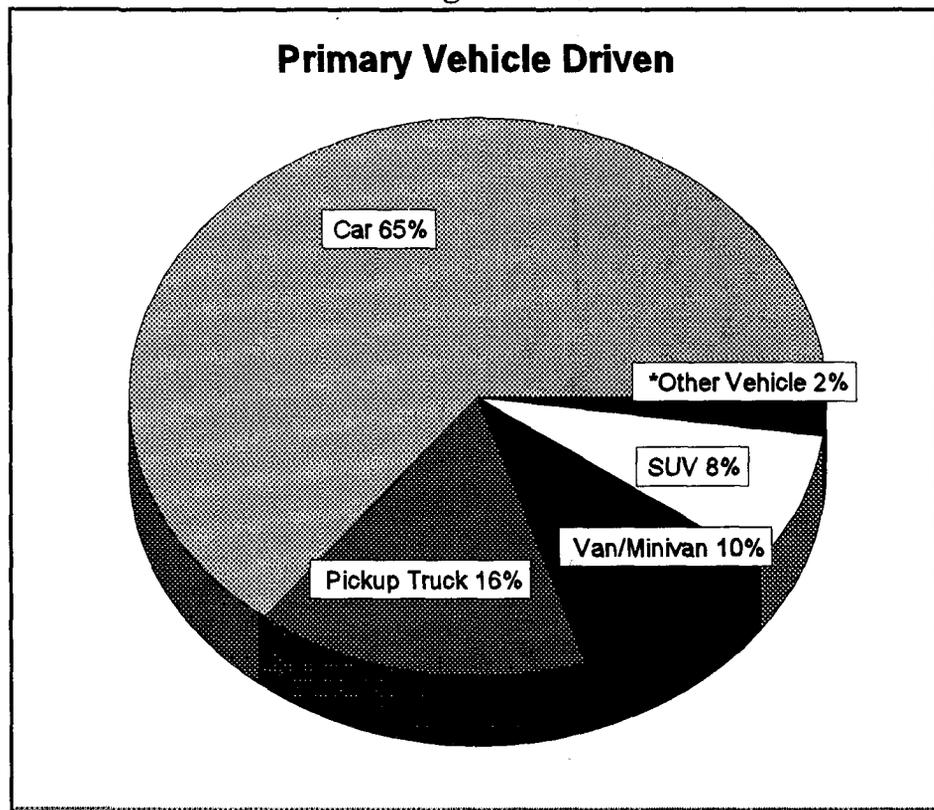
| | Almost Every Day | A Few Days A Week | A Few Days A Month | A Few Days A Year | Never | Subsample Size |
|-----------------------|------------------------|-------------------------|--------------------------|-------------------------|-------|-------------------|
| Age | | | | | | |
| 16-20 | 62% | 16% | 4% | 2% | 16% | (N = 769) |
| 21-24 | 79% | 7% | 3% | 1% | 10% | (N = 601) |
| 25-34 | 85% | 5% | 1% | 1% | 8% | (N = 2059) |
| 35-44 | 88% | 4% | 1% | * | 5% | (N = 1916) |
| 45-54 | 88% | 5% | 1% | 1% | 6% | (N = 1063) |
| 55-64 | 77% | 12% | 2% | * | 9% | (N = 674) |
| 65+ | 60% | 23% | 2% | 1% | 14% | (N = 956) |
| Sex | | | | | | |
| Male | 84% | 7% | 1% | 1% | 6% | (N = 3850) |
| Female | 73% | 12% | 2% | 1% | 12% | (N = 4365) |
| Race/Ethnicity | | | | | | |
| Black | 66% | 9% | 2% | 1% | 21% | (N = 818) |
| White | 82% | 10% | 1% | 1% | 6% | (N = 6199) |
| Hispanic | 65% | 9% | 2% | 1% | 23% | (N = 776) |
| Non-Hispanic | 80% | 10% | 2% | 1% | 8% | (N = 7372) |
| Income | | | | | | |
| < \$15,000 | 54% | 17% | 3% | 1% | 24% | (N = 911) |
| \$15,000-29,999 | 77% | 10% | 2% | * | 10% | (N = 1486) |
| \$30,000-49,999 | 85% | 8% | 1% | 1% | 4% | (N = 1909) |
| \$50,000-74,999 | 90% | 6% | 1% | * | 3% | (N = 1397) |
| \$75,000-99,999 | 92% | 5% | 1% | 1% | 1% | (N = 595) |
| \$100,000 > | 91% | 4% | 2% | 1% | 2% | (N = 544) |

* Less than 0.5%

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Many households have more than one motor vehicle, so drivers may use more than one. Since the type of safety equipment may vary from one vehicle to another, drivers were asked about the vehicle that they drive most often. Slightly fewer than two-thirds (65%) of drivers use a car as their primary vehicle, followed by 16% who drive a pickup truck, 10% who drive a van or minivan, and 8% who drive a sport utility vehicle.

Figure 2



Qx: Is the vehicle you drive most often a car, van, motorcycle, sport utility vehicle, pickup truck, or other type of truck?

Base: Drives a motor vehicle.

Unweighted N=7509

** Includes 0.3% motorcycles and 0.4% other truck.*

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

The survey posed a series of questions to respondents to determine the type of seat belt installed in the front seat of the respondent's primary vehicle. The initial question asked whether it was a lap belt, shoulder belt, or both.

Seat belts in 90% of vehicles went across both the lap and shoulder. Differences were relatively small across vehicle types, although lap only belts were slightly more likely among pickup trucks while shoulder only belts appeared somewhat less frequently among sport utility vehicles. Only 10 vehicles out of a total of almost 7500 reportedly had no seat belts.

TABLE 2
Seat Belt Configuration By Type of Primary Vehicle

Qx: For the next series of questions, please answer only for the (car/truck/van) you said you usually drive. Do the seat belts in the front seat of the (car/truck/van) go across your shoulder only, across your lap only, or across both your shoulder and lap?

Base: Vehicle driven most often is not a motorcycle.

| Seat Belt Position | Total | Car | Van/Minivan | SUV | Pickup Truck |
|----------------------|---------------|-------------|-------------|-----------|--------------|
| | (N = **7,486) | (N = 4,849) | (N = 684) | (N = 708) | (N = 1,134) |
| Across shoulder only | 7% | 8% | 7% | 4% | 7% |
| Across lap only | 2% | 1% | 2% | 1% | 5% |
| Across both | 90% | 90% | 91% | 95% | 88% |
| Vehicle has no belts | * | * | — | — | * |
| Don't know, refused | * | * | * | — | * |

* Less than 0.5% – Zero cases

** Includes 39 other trucks, 61 other vehicles, and 11 didn't know or didn't respond to vehicle type.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

If the front seat belt went across both the shoulder and lap, the survey asked if it was one piece or two separate belts. The survey also asked if the seat belt was automatic. Table 3 shows that

TABLE 3. Type of Driver Seat Belt In Primary Vehicle

Qx: Do the seat belts in the front seat of the (car/truck/van) go across your shoulder only, across your lap only, or across both your shoulder and lap?

Qx: Are the shoulder and lap belt one piece or are they two separate belts?

Qx: Are both the shoulder and lap belt automatic, is only the shoulder belt automatic or is neither the shoulder or lap belt automatic?

Qx: Is the shoulder belt automatic or do you have to fasten it?

| N | Belt System Type | Description | Percent |
|-------|--------------------------------------|--|------------|
| | One-Piece Systems | Only one buckle | 88% |
| 153 | Lap Belt Only | One belt that goes across the driver's lap. | 2% |
| 5,630 | Lap/Shoulder-Manual | Combination system that must be pulled and buckled by the driver. | 75% |
| 301 | Lap/Shoulder-Automatic | Combination system that automatically fastens around the driver. | 4% |
| 434 | Shoulder Only-Manual | One belt that goes across the driver's shoulder that must be pulled and buckled by the driver. | 6% |
| 66 | Shoulder Only-Automatic | One belt that automatically fastens across the driver's shoulder. | 1% |
| 7 | One Piece-DK/REF | One piece, don't know if automatic/refused to say. | * |
| | Two-Piece Systems | Two separate buckles for lap and shoulder belts | 12% |
| 294 | Lap Manual/ Shoulder Manual | Driver must pull and fasten each belt separately. | 4% |
| 493 | Lap Manual/ Shoulder Automatic | Belt automatically fastens across driver's shoulder but driver must pull and fasten lap belt | 6% |
| 51 | Lap Automatic/ Shoulder Automatic | Each belt automatically fastens around the driver. | 1% |
| 3 | Two-Piece/DK | Two piece, don't know if automatic. | * |
| 30 | DK | Don't know if one-piece or two-piece. | * |

* Less than 0.5%

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

three quarters (75%) of front seat belts (in primary vehicles) were one-piece manual lap/shoulder systems. Relatively few seat belts (12%) had an automatic component, whether one-piece or two-piece. In addition, 6% of those with automatic belts said that they at least sometimes disconnected, disabled, or placed the belt behind them. Thus if the definition of "automatic" was limited to those seat belts where the automatic function was always being used, then the percentage of all seat belts that were automatic dropped to 11%.

The results also suggested that some people may not fully understand their belt system. Several dozen respondents answered "Don't Know" to one or more basic belt configuration questions. In addition, two-piece lap/shoulder belts where both belts were automatic are not known to exist in the vehicle fleet (i.e., automatic lap belts not having been installed into production vehicles).

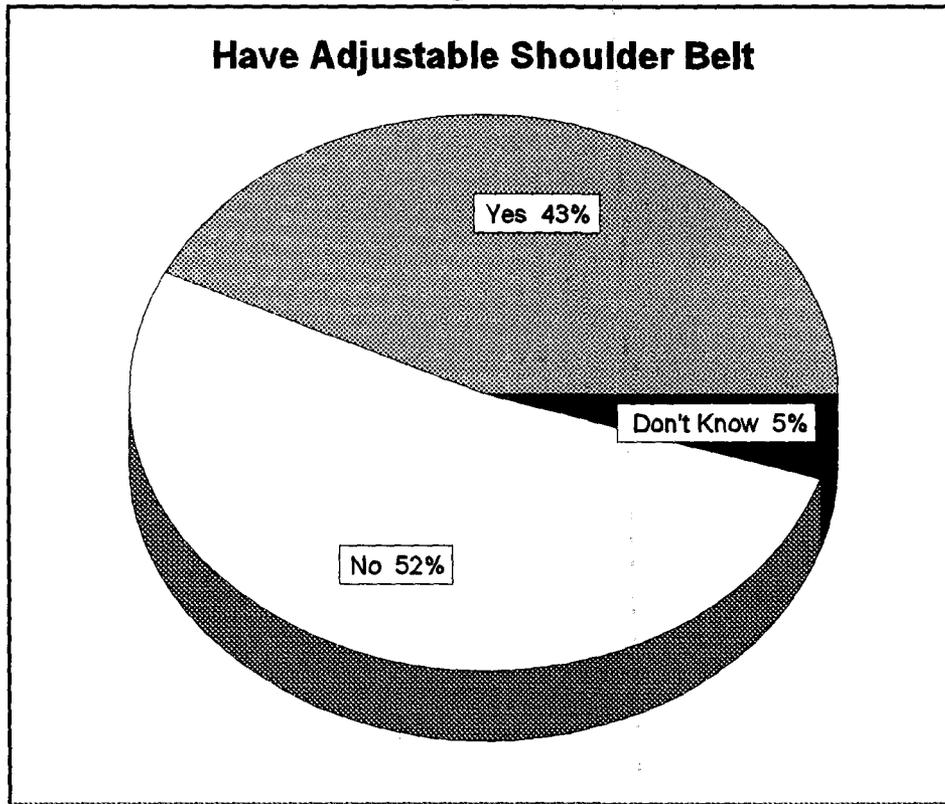
1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Adjustable Shoulder Belt

Drivers were asked if their shoulder belts were adjustable (i.e., their attachment to the door or frame behind the driver's left shoulder can be moved up or down). This feature allows adjustment of the shoulder strap to obtain a more comfortable fit.

More than four out of ten (43%) reported having a shoulder belt that they could adjust, with 52% having non-adjustable shoulder belts. A small percentage (5%) said they were not sure.

Figure 3



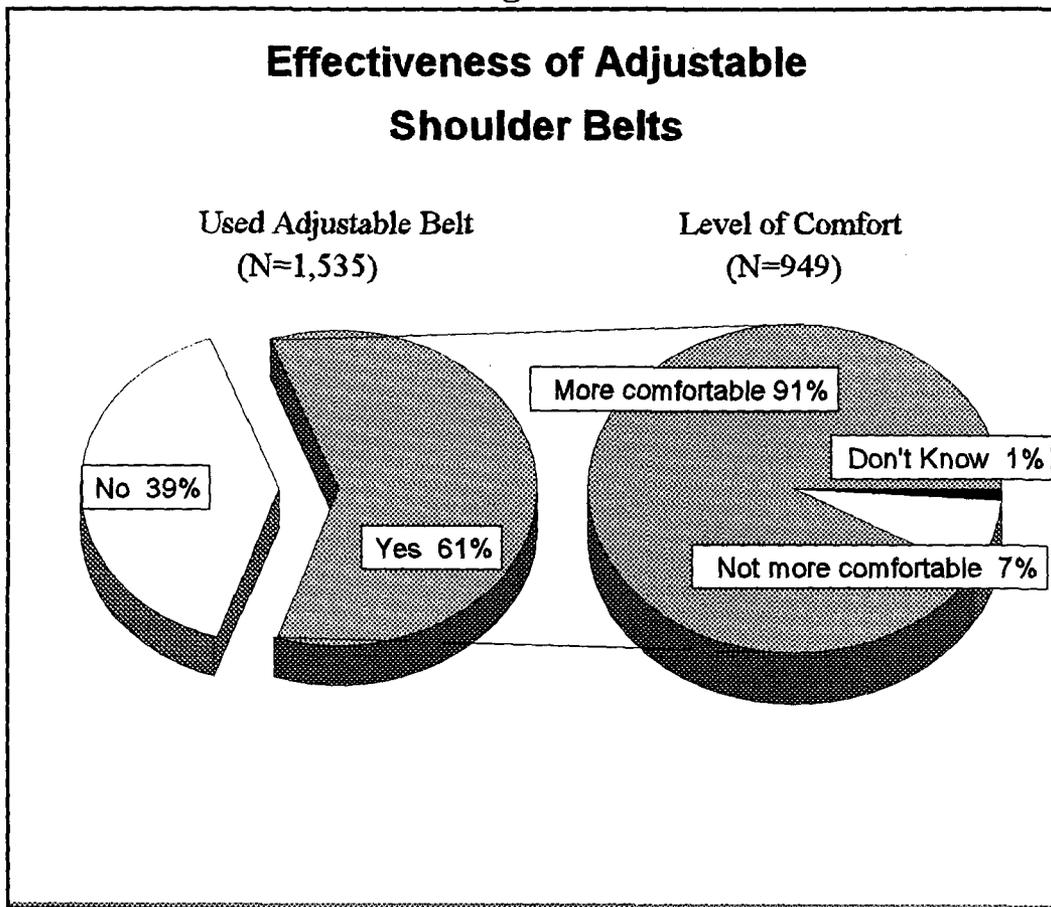
Qx: Shoulder belts are usually attached to the door or frame behind the driver's left shoulder. In some vehicles, this attachment can be moved up or down to adjust the shoulder belt. Is this attachment adjustable in your vehicle?

Base: Vehicle has seat belts across both lap and shoulder or across shoulder only.

Unweighted N=3613

Six in ten drivers (61%) with adjustable shoulder belts said they had tried to adjust them. More than nine in ten (91%) said their adjustments made the belts more comfortable.

Figure 4



Qx: Have you ever tried to adjust it?

Qx: Were you able to make the shoulder belt more comfortable by adjusting it?

Base: Vehicle has adjustable shoulder belts.

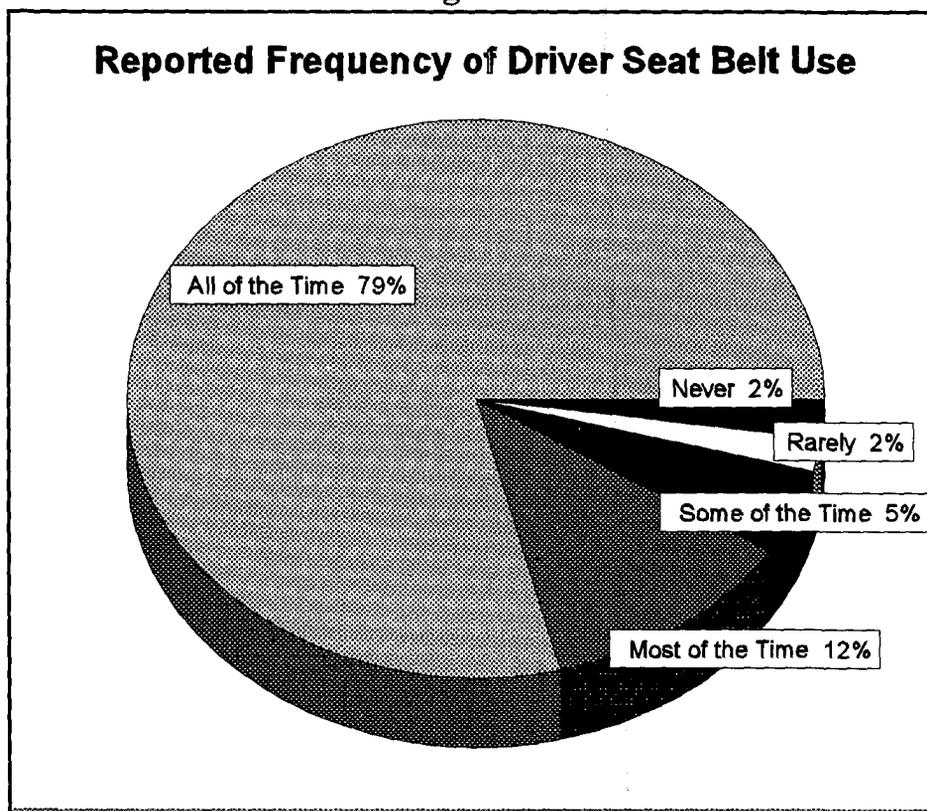
Unweighted N's listed above.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Drivers' Use of Seat Belts

The vast majority of drivers (79%) reported using their seat belt "all of the time" while driving. Most of the remaining drivers (12%) said they used their seat belt "most of the time." Few drivers acknowledged that they rarely (2%) or never (2%) wore their seat belt.¹

Figure 5



Qx: When driving this (car/truck/van) how often do you wear your (shoulder/lap) belt?

Base: Drivers whose primary vehicle has seat belts.

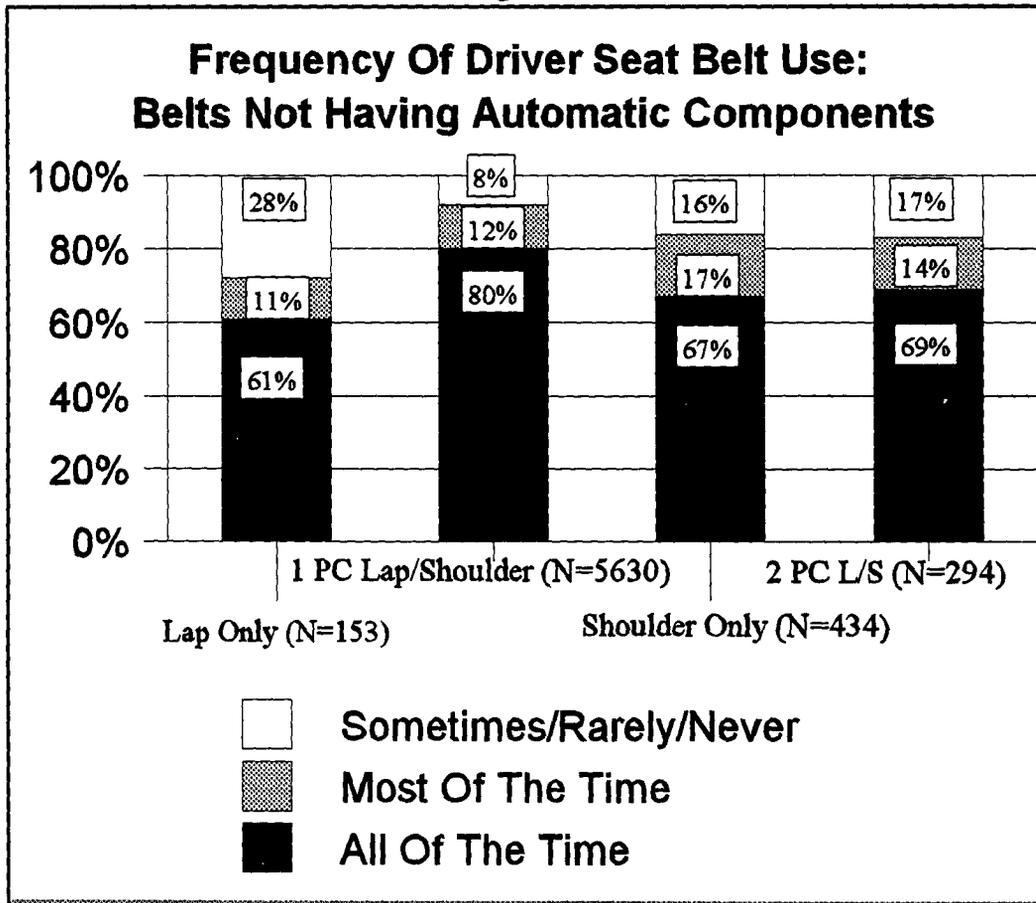
Unweighted N=7,462

¹Frequency of seat belt use was determined by combining the two questions which asked how often drivers wore their lap belt and their shoulder belt. Values were assigned by taking the highest response for either question. For example, if a respondent stated that s/he wore a shoulder belt "all of the time" but a lap belt "most of the time", the respondent was assigned to the category "all the time."

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

The type of seat belt made a difference in whether persons wore it or not. Among those belt systems not containing an automatic component, the highest usage occurred with one-piece manual lap and shoulder belts as 80% indicated that they buckled up "all the time." The least usage occurred with lap-only seat belts; only 61% reported wearing these belts all the time.

Figure 6



Qx: Do the seat belts in the front seat of the (car/truck/van) go across your shoulder only, across your lap only, or across both your shoulder and lap?

Qx: Are the shoulder and lap belt one piece or are they two separate belts?

Qx: Are both the shoulder and lap belt automatic, is only the shoulder belt automatic or is neither the shoulder or lap belt automatic?

Qx: When driving this [vehicle] how often do you wear your [lap/shoulder] belt?

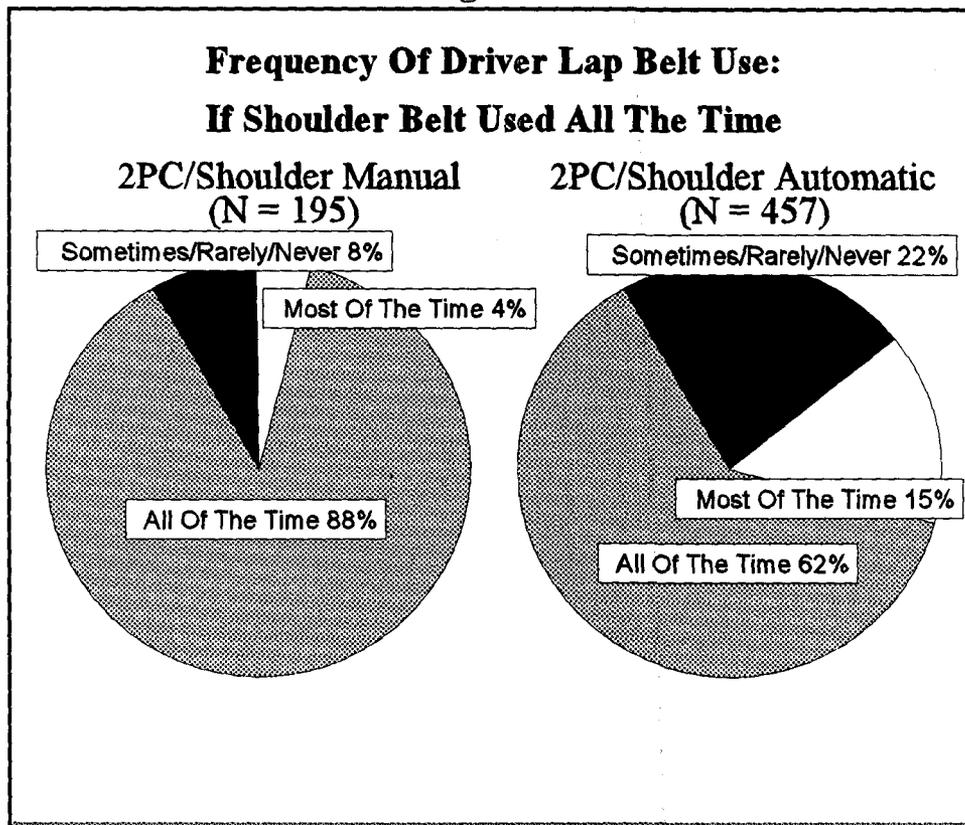
Base: Drivers whose seat belts have no automatic component.

Unweighted N's listed above.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

A key question about two-piece belt systems is whether persons who wear their shoulder belt also put on their lap belt (lap and shoulder belts used together are the most effective form of restraint use for preventing injuries and fatalities). As shown in Figure 7, if the shoulder belt was manual and used all the time, then 88% of drivers said that they also wore their lap belt all the time. But if the shoulder belt was automatic and used all of the time, then only 62% said they wore their lap belt all the time [this analysis excluded systems reported to have both an automatic lap belt and an automatic shoulder belt because they were considered to be errors in belt identification by respondents].

Figure 7



Qx: Are the shoulder and lap belt one piece or are they two separate belts?

Qx: Are both the shoulder and lap belt automatic, is only the shoulder belt automatic or is neither the shoulder or lap belt automatic?

Qx: When driving this [vehicle] how often do you wear your [lap/shoulder] belt?

Base: Drivers with two-piece belt systems (lap belt is manual) who always use their shoulder belt.

Unweighted N's listed above.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Group Differences In Reported Seat Belt Use

Table 4 presents group differences in reported seat belt use by drivers while driving. The “all of the time” response category is the primary index employed by this survey to describe level of seat belt use. It therefore provides a good point of reference for readers to focus upon in reviewing the Table.

The data were consistent with previous research. One of the largest differentiating factors in belt use was the sex of the driver. Females (84%) were significantly more likely to report “all the time” use than males (74%). As expected, reported usage was somewhat lower among the youngest driver age groups.

Blacks (75%) were somewhat less likely to report “all the time” use compared to whites (79%).² At the same time, Hispanics (85%) recorded higher levels of reported “all the time” usage than non-Hispanics (79%). It bears noting that a large proportion of Hispanics in the study sample resided in states whose seat belt laws contained provisions permitting standard (as opposed to secondary) enforcement of seat belt violations.³ In particular, a substantial proportion of the Hispanic subsample resided in California, which has standard enforcement provisions as well as the highest observed seat belt usage rate of any state according to 1998 figures.

The higher the household income, the more likely that drivers said they wore their seat belt “all the time.” The most highly educated segment of the population also was more likely to report full time usage. Little difference emerged between rural (77%), suburban (80%), and urban (80%) populations in “all the time” usage. But if drivers usually drove a pickup truck then reported usage tended to be lower; only 65% said they wore their seat belt all of the time.

Table 4 also lists reported seat belt usage by weight and height for each sex. In presenting the data, the sample was divided into approximate quartiles (clustering of data prevented the construction of groups of equal size). For both sexes, the lowest reported belt use occurred among the heaviest quartile: males more than 205 pounds and females more than 160 pounds. Height did not show the same level of differentiation as did weight.

² See operational definition on page xxvi

³ See page 134 for more information on standard and secondary enforcement.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

TABLE 4
Driver Seat Belt Use By Demographic And Other Characteristics

Qx: When driving this [vehicle], how often do you wear your [lap/shoulder] belt?

Base: Drivers whose primary vehicle has seat belts.

| | All Of The Time | Most of the Time | Some Of The Time | Rarely | Never | Subsample Size |
|--------------|-----------------|------------------|------------------|--------|-------|----------------|
| Total | 79% | 12% | 5% | 2% | 2% | (N=7,462) |
| Sex | | | | | | |
| Male | 74% | 13% | 6% | 3% | 4% | (N=3,569) |
| Female | 84% | 10% | 3% | 1% | 1% | (N=3,893) |
| Age | | | | | | |
| 16-20 | 77% | 12% | 5% | 4% | 3% | (N=644) |
| 21-24 | 75% | 15% | 6% | 3% | 1% | (N=543) |
| 25-34 | 76% | 12% | 6% | 3% | 3% | (N=1,900) |
| 35-44 | 79% | 12% | 4% | 2% | 3% | (N=1,818) |
| 45-54 | 82% | 10% | 4% | 1% | 3% | (N=993) |
| 55-64 | 78% | 12% | 6% | 2% | 2% | (N=609) |
| 65+ | 84% | 11% | 4% | 1% | 1% | (N=808) |
| Race | | | | | | |
| Black | 75% | 13% | 8% | 2% | 2% | (N=663) |
| White | 79% | 12% | 5% | 2% | 2% | (N=5,812) |
| Other | 85% | 10% | 3% | 1% | 2% | (N=707) |
| Multi-Race | 81% | 9% | 4% | 3% | 3% | (N=164) |
| Ethnicity | | | | | | |
| Hispanic | 85% | 9% | 3% | 1% | 2% | (N=601) |
| Non-Hispanic | 79% | 12% | 5% | 2% | 2% | (N=6811) |
| Education | | | | | | |
| 11 Or Less | 78% | 11% | 6% | 2% | 3% | (N=786) |
| HS Grad/GED | 75% | 13% | 6% | 2% | 4% | (N=2,264) |
| Some College | 78% | 13% | 5% | 2% | 2% | (N=1,953) |
| College Grad | 85% | 10% | 3% | 2% | 1% | (N=2,404) |

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

TABLE 4 (CONTINUED)
Driver Seat Belt Use By Demographic And Other Characteristics

| | All Of The Time | Most Of The Time | Some Of The Time | Rarely | Never | Subsample Size |
|--|-----------------|------------------|------------------|--------|-------|----------------|
| Income | | | | | | |
| <\$15,000 | 74% | 13% | 6% | 3% | 3% | (N=691) |
| \$15,000-29,999 | 76% | 13% | 6% | 2% | 2% | (N=1,342) |
| \$30,000-49,999 | 77% | 13% | 5% | 2% | 4% | (N=1,823) |
| \$50,000-74,999 | 81% | 11% | 4% | 2% | 2% | (N=1,357) |
| \$75,000-99,999 | 83% | 10% | 4% | 1% | 1% | (N=583) |
| \$100,000+ | 86% | 9% | 2% | 1% | 1% | (N=527) |
| Child Under Age 16 In Household | 78% | 12% | 5% | 2% | 3% | (N=3122) |
| No Child Under 16 In Household | 80% | 11% | 5% | 2% | 2% | (N=4328) |
| Urbanicity | | | | | | |
| Urban | 80% | 11% | 5% | 2% | 2% | (N=2,227) |
| Suburban | 80% | 11% | 5% | 2% | 2% | (N=3,633) |
| Rural | 77% | 14% | 5% | 2% | 3% | (N=1,602) |
| Vehicle Type | | | | | | |
| Car | 82% | 10% | 4% | 2% | 1% | (N=4,841) |
| Van/MiniVan | 83% | 10% | 4% | 1% | 3% | (N=681) |
| Pickup | 65% | 17% | 9% | 4% | 6% | (N=1,127) |
| SUV | 80% | 12% | 4% | 1% | 3% | (N=708) |
| Injured In Crash | | | | | | |
| Yes | 77% | 12% | 5% | 3% | 3% | (N=2,195) |
| No | 80% | 11% | 4% | 2% | 2% | (N=5,260) |

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

TABLE 4 (CONTINUED)
Driver Seat Belt Use By Demographic And Other Characteristics

| | All Of The Time | Most Of The Time | Some Of The Time | Rarely | Never | Subsample Size |
|----------------|--------------------|---------------------|---------------------|--------|-------|-------------------|
| Weight | | | | | | |
| Males | | | | | | |
| 90-162 lbs | 72% | 17% | 5% | 1% | 5% | (N=434) |
| 163-180 lbs | 78% | 11% | 5% | 3% | 3% | (N=437) |
| 181-205 lbs | 79% | 12% | 5% | 2% | 2% | (N=447) |
| 206+ lbs | 67% | 14% | 9% | 3% | 7% | (N=422) |
| Females | | | | | | |
| 85-125 lbs | 86% | 10% | 2% | 1% | 1% | (N=506) |
| 126-140 lbs | 85% | 9% | 2% | 3% | 2% | (N=468) |
| 141-160 lbs | 83% | 9% | 3% | 3% | 1% | (N=418) |
| 161+ lbs | 77% | 15% | 5% | 1% | 1% | (N=412) |
| Height | | | | | | |
| Males | | | | | | |
| 4'3"-5'8" | 77% | 12% | 6% | 2% | 3% | (N=520) |
| 5'9"-5'10" | 72% | 15% | 5% | 3% | 4% | (N=409) |
| 5'11"-6'0" | 74% | 12% | 6% | 3% | 5% | (N=459) |
| 6'1"+ | 72% | 15% | 7% | 2% | 4% | (N=367) |
| Females | | | | | | |
| 4'0"-5'2" | 83% | 11% | 4% | 2% | 1% | (N=491) |
| 5'3"-5'4" | 81% | 11% | 4% | 3% | 2% | (N=513) |
| 5'5"-5'6" | 86% | 9% | 2% | 1% | 1% | (N=434) |
| 5'7"+ | 84% | 11% | 3% | 1% | 1% | (N=446) |

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Relating Seat Belt Use To Other (Problem) Behaviors

Past research has suggested that persons who do not wear their seat belt are more likely to engage in other unsafe or unhealthy behaviors. The 1998 Motor Vehicle Occupant Safety Survey asked questions on alcohol use of all 8,215 respondents (i.e., the items were on both questionnaires), and questions on driving speed of the 4,000+ respondents who received Questionnaire Version #1. Tables 5 and 6 show drivers' reported belt use according to how persons answered these questions.

Whether or not persons had consumed alcohol in the recent past did not make much difference in reported seat belt use, with only a slightly higher percentage of non-drinkers (82%) than drinkers (78%) reporting "all the time" use. Rather, what seemed to matter was the manner in how people drank. Those drivers who typically had 1 drink on the days they drank reported the highest belt use among drinkers: 84% said they wore their seat belt all of the time. Reported all the time use declined to 76% for those who averaged 2-3 drinks, 69% for those who averaged 4-6, and 53% for those who averaged more than 6. Among those persons who stated that they had driven a vehicle after drinking alcohol within the past 30 days, 71% claimed they wore their seat belt all of the time while driving. If they acknowledged driving when they thought they had consumed too much alcohol to drive safely, all the time use fell to 60% (although the number of persons who conceded that they drove after drinking too much was small).

Reported seat belt use was lower among persons who tended to drive faster. The survey asked drivers which statement best described their highway driving: "I tend to pass other cars more often than other cars pass me" or "Other cars tend to pass me more often." Those who tended to pass others were less likely to report wearing their seat belt all the time (73% compared to 82% of those who tended to drive slower than the prevailing traffic). The survey also asked how fast the respondents generally drove on a highway with a posted speed limit of 55 miles per hour. As reported driving speeds increased, acknowledged belt use declined.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

TABLE 5
Driver Seat Belt Use By Alcohol Use

- Qx: When driving this [vehicle] how often do you wear your [lap/shoulder] belt?*
Qx: During the past 30 days, have you had at least one drink of any alcoholic beverage, including liquor, beer, wine or wine coolers?
Qx: Did you drink any alcoholic beverages at all during the past 12 months?
Qx: On the average, how many drinks did you typically have on the days you drank?
Qx: During the past 30 days, have you driven a vehicle after you had been drinking alcohol?
Qx: In the past 30 days, have you driven a vehicle when you thought you might have consumed too much alcohol to drive safely?
Base: Drivers whose primary vehicle has seat belts.

| | All Of The Time | Most Of The Time | Some Of The Time | Rarely | Never | N |
|---|-----------------|------------------|------------------|--------|-------|--------|
| <u>Alcohol Use:</u> | | | | | | |
| Within Past 30 Days | 78% | 12% | 5% | 2% | 3% | (4041) |
| In Past Year, But Not Past 30 Days | 78% | 11% | 6% | 3% | 2% | (995) |
| Not In Past Year | 82% | 11% | 4% | 2% | 2% | (2401) |
| <u>Usual Number Of Drinks:</u> | | | | | | |
| 1 | 84% | 10% | 3% | 1% | 2% | (1827) |
| 2-3 | 76% | 12% | 6% | 2% | 3% | (2311) |
| 4-6 | 69% | 15% | 6% | 5% | 5% | (620) |
| 7 or more | 53% | 17% | 13% | 12% | 5% | (154) |
| Drank And Drove In Past 30 Days | 71% | 15% | 7% | 4% | 4% | (1015) |
| Drank Too Much And Drove In Past 30 Days | 60% | 11% | 12% | 7% | 10% | (71) |

TABLE 6
Driver Seat Belt Use By Driving Speed

Qx: When driving this [vehicle], how often do you wear your [lap/shoulder] belt?
Qx: Which statement best describes your highway driving: I tend to pass other cars more often than other cars pass me, or other cars tend to pass me more often?
Qx: In general, how fast do you drive on a highway with a posted speed limit of 55 mph?
Base: Drivers whose primary vehicle has seat belts.

| | All Of The Time | Most Of The Time | Some Of The Time | Rarely | Never | N |
|---------------------------------------|-----------------|------------------|------------------|--------|-------|--------|
| I tend to pass other cars more often | 73% | 14% | 6% | 3% | 4% | (1253) |
| Other cars tend to pass me more often | 82% | 11% | 4% | 2% | 2% | (2095) |
| Neither, I drive the same as others | 82% | 8% | 6% | 1% | 2% | (190) |
| Normal speed on 55mph highway: | | | | | | |
| 55 or less | 83% | 9% | 4% | 2% | 2% | (1066) |
| 56-60 | 79% | 12% | 5% | 2% | 3% | (1578) |
| 61-70 | 73% | 15% | 5% | 3% | 3% | (922) |
| More than 70 | 69% | 17% | 2% | 5% | 7% | (85) |

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Comparing Reported To Observed Seat Belt Use

Reported seat belt usage tends to be higher than observed usage for methodological and psychological reasons. NHTSA conducted a national observation survey of seat belt use close in time to the field period for this telephone survey (the National Occupant Protection Use Survey, commonly known as NOPUS). Table 7 compares results from the two surveys for drivers. "All of the time" use is the selected measure for the telephone survey. The two surveys detected similar patterns. Both found substantial differences between males and females, and between drivers of passenger cars and pickup trucks. They also detected slightly higher use by whites compared to blacks. Unlike the telephone survey, the observation survey recorded much lower usage within the younger driver ages, and higher usage in urban areas compared to suburban and rural.

TABLE 7
Reported Seat Belt Use Compared To Observed Use By Drivers

| | 1998 MVOSS (National Telephone Survey) "All Of The Time" | 1998 NOPUS (National Observation Survey) Drivers |
|----------------|--|--|
| Total Drivers | 79% | 69.6% |
| Male | 74% | 64.3% |
| Female | 84% | 77.7% |
| Black | 75% | 67.5% |
| White | 79% | 70.3% |
| Age 16-24 | 76% | 58.4% |
| Age 25-69 | 79% | 70.5% |
| Age 70+ | 85% | 76.4% |
| Passenger Cars | 82% | 73.8% |
| Pickup Trucks | 65% | 52.8% |
| Urban | 80% | 74.5% |
| Suburban | 80% | 67.6% |
| Rural | 77% | 67.0% |

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Clarifying Reported Usage

Questionnaire development during 1994 included cognitive testing. During the testing, subjects were asked how often they wore their seat belt while driving their usual vehicle. Most said "all the time." The interviewers then followed that question with a cognitive probe, asking the subjects when was the last time they did not wear their seat belt while driving. A number of persons who had just previously said that they wore their seat belt "all of the time" while driving responded "yesterday" or even that very morning. It thus appeared that some subjects chose to

TABLE 8
Last Time Drivers Did Not Wear Seat Belt
By Frequency Of Reported Seat Belt Use

Qx: When driving this [vehicle] how often do you wear your [lap/shoulder] belt?
Qx: When was the last time you did not wear your seat belt (neither lap nor shoulder) while driving?
Qx: Has there been any occasion in the past 12 months when you did not wear your seat belt (neither lap nor shoulder) when driving?
Base: Drivers whose primary vehicle has seat belts, and who at least on occasion wear seat belts.

| Last Time Seat Belt Not Worn | All Of The Time | Most Of The Time | Some Of The Time | Rarely |
|----------------------------------|-----------------|------------------|------------------|---------|
| | (N=5863) | (N=872) | (N=354) | (N=186) |
| Today | 4% | 32% | 64% | 75% |
| Past Week | 6% | 40% | 28% | 17% |
| Past Month | 4% | 12% | 4% | 4% |
| Past Year | 4% | 3% | 2% | 2% |
| DK/Within Past Year ⁴ | 3% | 6% | * | 2% |
| Year Or More Ago | 79% | 7% | 3% | * |

⁴Note: "DK/Within Past Year" refers to those who weren't sure when asked the last time they did not wear their seat belt, but who recalled not wearing it at some time in the past year.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

interpret the initial usage question in a way that differed from the exact wording of the item. NHTSA included the cognitive probe in the survey. As shown in Table 8, 10% of drivers who said that they wore their seat belts "all of the time" immediately acknowledged not using their seat belt while driving in the past day or week. More than 70% of self-reported "most of the time" users admitted recent non-use, indicating that usage by at least some people in this category may be much more sporadic than the label would suggest. In general, the data implied a significant difference in usage between the "all of the time" and "most of the time" categories.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Revised Comparison of Reported To Observed Seat Belt Use

Table 9 shows what happens when “all of the time” users who conceded not wearing their seat belt in the past day or week while driving were subtracted from the “all of the time” category. The remaining percentages of “all of the time” users closely approximated the observation figures for drivers. In addition, the gap on the telephone survey between the youngest and older drivers widened to become more comparable to the observation data. This indicated a greater tendency by younger drivers to categorize themselves as “all of the time” users when they had not worn their seat belts recently.

TABLE 9
Revised Reported Seat Belt Use
Compared To Observed Use By Drivers

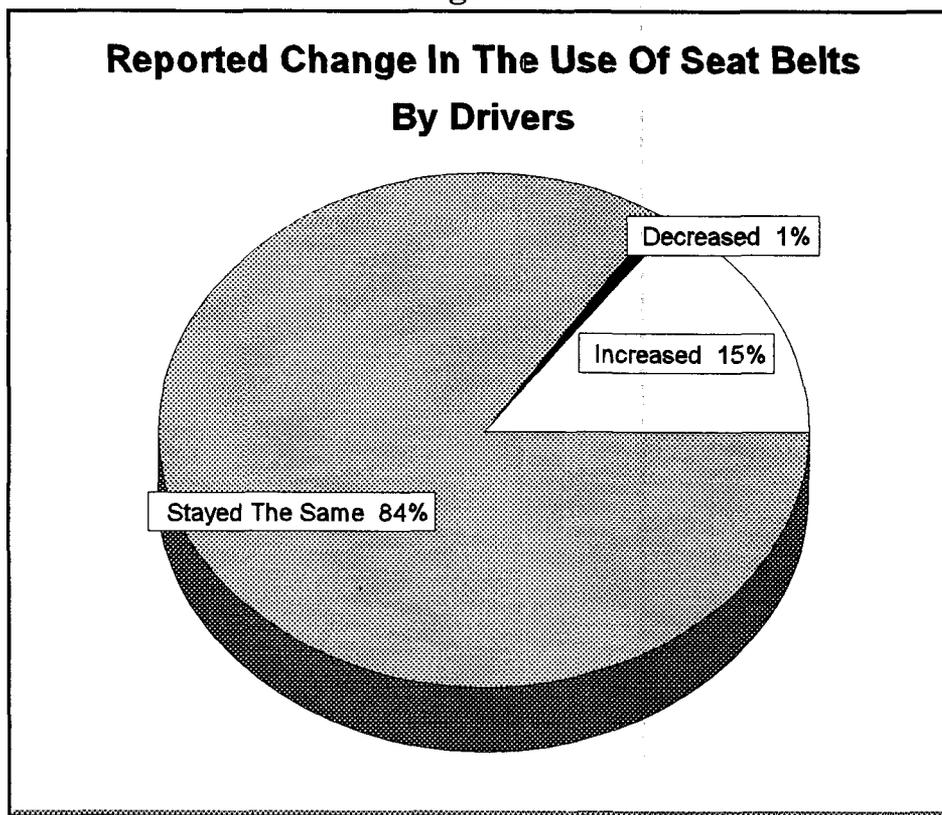
| | 1998 MVOSS (Telephone Survey) “All Of The Time” | Revised 1998 MVOSS (Telephone Survey) “All Of The Time” (Excludes past day or week non-users) | 1998 NOPUS (Observation Survey) Drivers |
|----------------|---|--|---|
| Total Drivers | 79.2% | 71.4% | 69.6% |
| Males | 74.1% | 65.4% | 64.3% |
| Females | 84.2% | 77.2% | 77.7% |
| Blacks | 75.2% | 69.5% | 67.5% |
| Whites | 78.9% | 70.9% | 70.3% |
| Age 16-24 | 76.0% | 63.9% | 58.4% |
| Age 25-69 | 79.1% | 72.2% | 70.5% |
| Age 70+ | 85.0% | 76.7% | 76.4% |
| Passenger Cars | 82.3% | 74.3% | 73.8% |
| Pickup Trucks | 64.7% | 57.6% | 52.8% |
| Urban | 79.7% | 71.8% | 74.5% |
| Suburban | 79.7% | 72.2% | 67.6% |
| Rural | 77.4% | 68.9% | 67.0% |

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Reported Changes In Belt Use

Besides questioning drivers about their current seat belt usage, the survey asked respondents whether their use of seat belts when driving had changed in the past 12 months. Most (84%) said that their usage had stayed the same. Fifteen percent answered that it had increased while 1% reported a decrease.

Figure 8



Qx: In the past 12 months, has your use of seat belts when driving (car driven most often) increased, decreased, or stayed the same?

Base: Drivers whose primary vehicle has seat belts.

Unweighted N=3703

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Regional Differences

NHTSA segments the country into ten regions for programmatic outreach. Table 10 shows both change in belt use and frequency of belt use reported across the ten regions.

| TABLE 10 | | | | |
|---|--------------------------------|---|-----------|--|
| Patterns Of Reported Driver Seat Belt Use By NHTSA Region | | | | |
| <i>Qx: When driving this [vehicle], how often do you wear your [lap/shoulder] belt?</i> | | | | |
| <i>Qx: In the past 12 months, has your use of seat belts when driving (car driven most often) increased, decreased, or stayed the same?</i> | | | | |
| <i>Base: Drivers whose primary vehicle has seat belts.</i> | | | | |
| NHTSA Regions | States | Change In Seat Belt Use Within Past Year (N=3703) | | Percent Of Drivers Reporting Using Seat Belt "All The Time" (N=7448) |
| | | Increased | Decreased | |
| I | CT, ME, MA, NH, RI, VT | 14% | – | 73% |
| II | NJ, NY | 12% | 1% | 79% |
| III | DE, DC, MD, PA, VA, WV | 17% | – | 76% |
| IV | AL, FL, GA, KY, MS, NC, SC, TN | 17% | 1% | 78% |
| V | IL, IN, MI, MN, OH, WI | 17% | 1% | 76% |
| VI | AR, LA, NM, OK, TX | 16% | * | 83% |
| VII | IA, KS, MO, NE | 22% | 1% | 70% |
| VIII | CO, MT, ND, SD, UT, WY | 17% | 1% | 71% |
| IX | AZ, CA, HI, NV | 10% | 1% | 92% |
| X | AK, ID, OR, WA | 11% | 1% | 82% |
| | TOTAL | 15% | 1% | 79% |

* Less than 0.5% – Zero cases

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

No more than 1% of drivers in any region reported that their use of seat belts in the past year when driving had decreased. The percentage of drivers who said that their usage had increased ranged from 10% in NHTSA Region IX to 22% in NHTSA Region VII. In some regions, smaller reported 12-month increases may reflect higher pre-existing usage rates that limited the amount of potential gain. For example, Region IX also recorded the highest overall usage rate: 92% of drivers said they wore their seat belts all of the time while driving. Readers are cautioned that some of the regional percentages are based on very small numbers. In particular, Regions I (187), VII (196), VIII (138), and X (167) all included fewer than 200 cases in computing the percentage increase/decrease.

Demographic Differences

According to the data in Table 11, persons who were younger, had less years of formal schooling, or were black were more likely to report that their use of seat belts as drivers increased in the past 12 months. This may again reflect how much opportunity there was to post a gain as these groups have in the past been associated with lower levels of seat belt use.

Among the groups listed, the percentage of drivers who reported an increase in seat belt use was highest for those who were ages 21-24 (26%), black (25%), or had less than a high school education (23%). Neither Hispanic origin, nor the sex of the driver, produced variation in the reported increase.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Table 11
Reported Changes In Driver's Use Of Seat Belts In The Past Year
By Demographic Characteristics

Qx: In the past 12 months, has your use of seat belts when driving (car driven most often) increased, decreased, or stayed the same?

Base: Drivers whose primary vehicle has seat belts.

| Characteristic | Unweighted N | Increased | Decreased | Stayed The Same |
|----------------|--------------|-----------|-----------|-----------------|
| Age | | | | |
| 16-20 | (326) | 18% | 2% | 78% |
| 21-24 | (267) | 26% | * | 72% |
| 25-34 | (981) | 17% | 1% | 81% |
| 35-44 | (875) | 17% | * | 83% |
| 45-54 | (506) | 11% | * | 89% |
| 55-64 | (297) | 12% | * | 87% |
| 65+ | (412) | 13% | * | 86% |
| Sex | | | | |
| Male | (1772) | 16% | 1% | 83% |
| Female | (1931) | 15% | 1% | 84% |
| Race | | | | |
| Black | (353) | 25% | 1% | 74% |
| White | (2855) | 15% | 1% | 84% |
| Ethnicity | | | | |
| Hispanic | (309) | 15% | — | 85% |
| Non-Hispanic | (3368) | 15% | 1% | 83% |
| Education | | | | |
| HS < | (379) | 23% | * | 76% |
| HS Grad | (1159) | 18% | 1% | 81% |
| Some College | (938) | 15% | 1% | 83% |
| College Grad | (1197) | 10% | * | 90% |

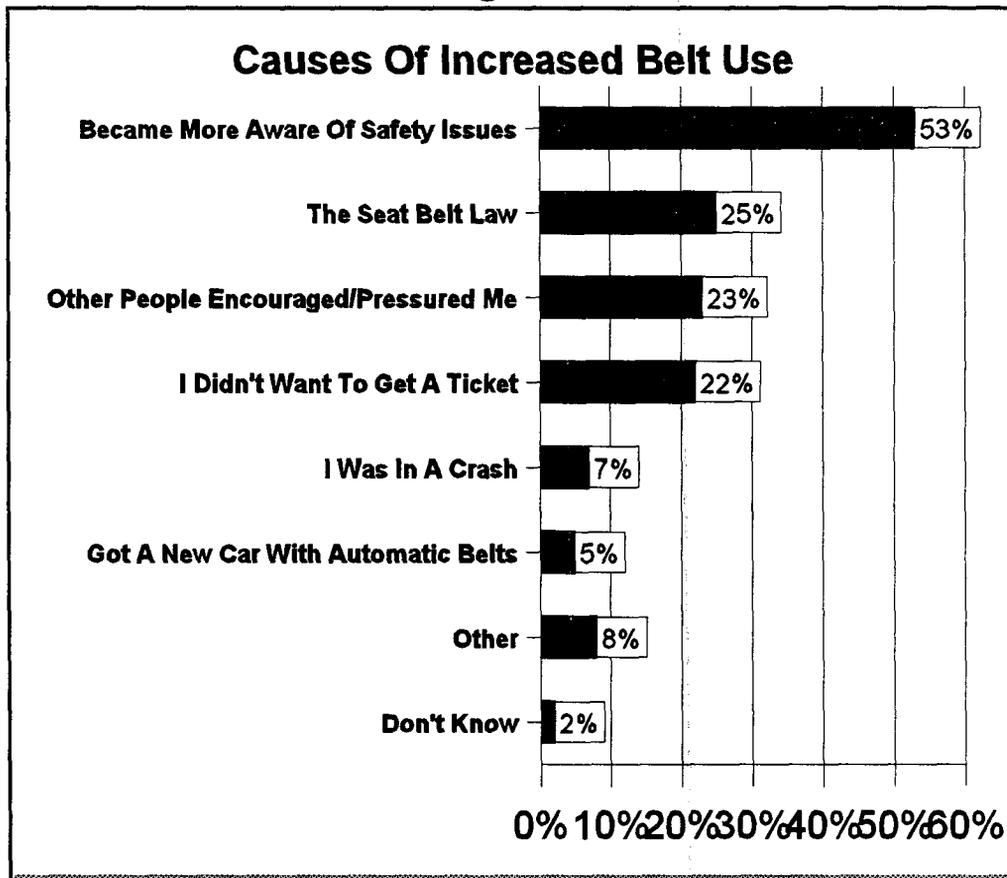
* Less than 0.5% — Zero Cases

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Reasons For Change

Drivers who said that their use of seat belts had increased over the past 12 months were asked what caused the change. Unlike previous years, the question was structured to obtain a reaction from the respondents to specific reasons rather than presented as an open-ended item. Thus interviewers read six potential reasons to the respondents, who then indicated for each whether it was a cause of their increased seat belt use. The interviewers also gave the respondents the opportunity to volunteer other reasons. Most often, the drivers ascribed their increased use of seat belts to a greater awareness of safety (53%). Belt laws (25%), pressure or encouragement from others (23%), and avoidance of a ticket (22%) also emerged as significant reasons.

Figure 9



Qx: What caused the change? Was it because.....?

Base: Drivers who reported an increase in seat belt use over the past 12 months.

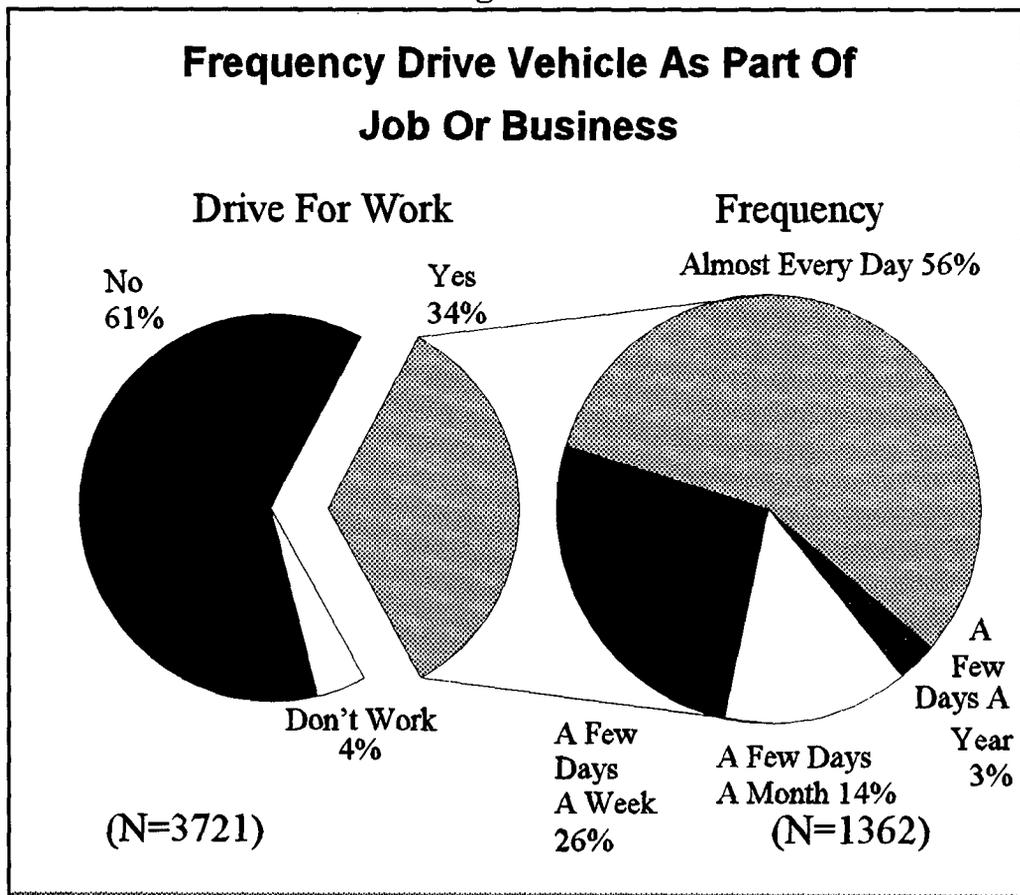
Unweighted N=578

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Company Seat Belt Policy

Thirty-four percent of drivers at least sometimes drove a vehicle as part of a job or business (not including driving to and from work). This was more prevalent among males (45%) than females (24%). If someone drove on the job, it usually occurred at least several days a week. More than one-half (56%) of those who drove on the job said they did so almost every day, another 26% said they did so a few days a week.

Figure 10



Qx: Not including driving to and from work, do you at least sometimes drive a motor vehicle as part of a job or business?

Qx: How often do you drive a vehicle as part of a job or business?

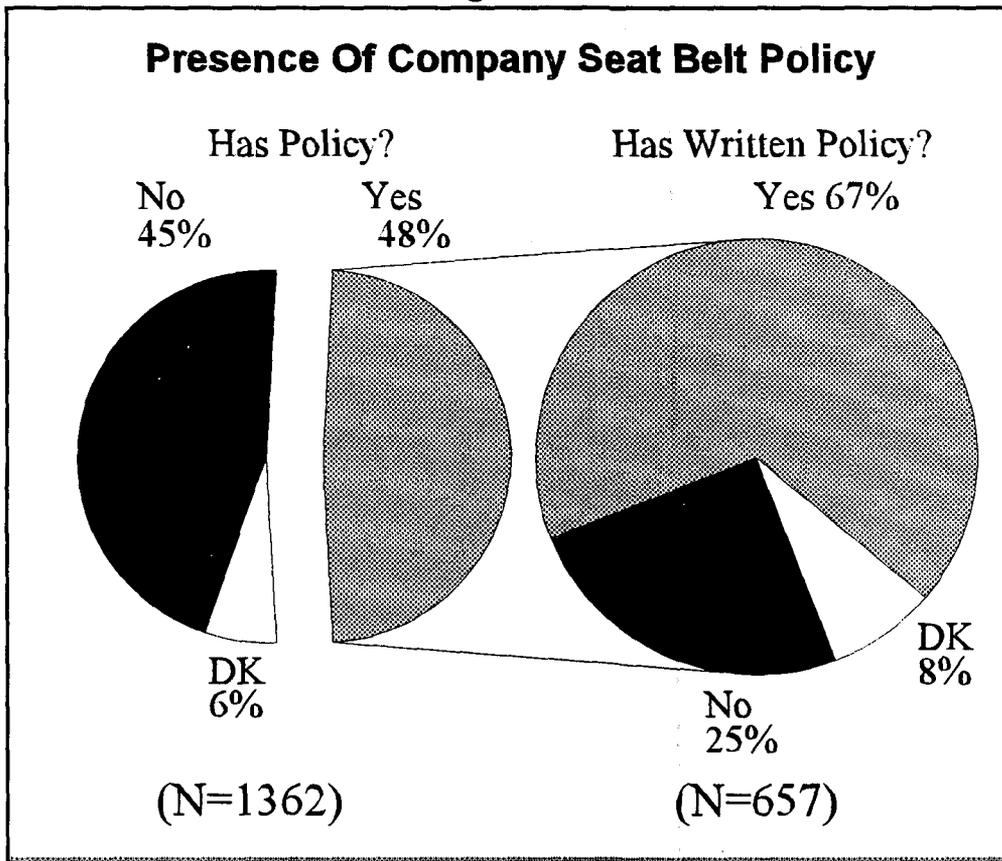
Base: Drives a motor vehicle.

Unweighted N's listed above

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Less than one-half of drivers (48%) who drove on the job believed their company had a policy requiring seat belt use when driving on the job. Almost as many (45%) said there was no policy and 6% were unsure. Among those who thought their company had a policy, two-thirds (67%) claimed it was a written policy. About one-quarter (25%) did not believe the policy was written, and 8% were unsure. In total, 32% of those who drove as part of a job or business reported that their company had a written policy requiring the use of seat belts when driving on the job.

Figure 11



Qx: Does your company or business have a policy requiring seat belt use when driving on the job?

Qx: Is that a written policy?

Base: Drivers who drive on the job

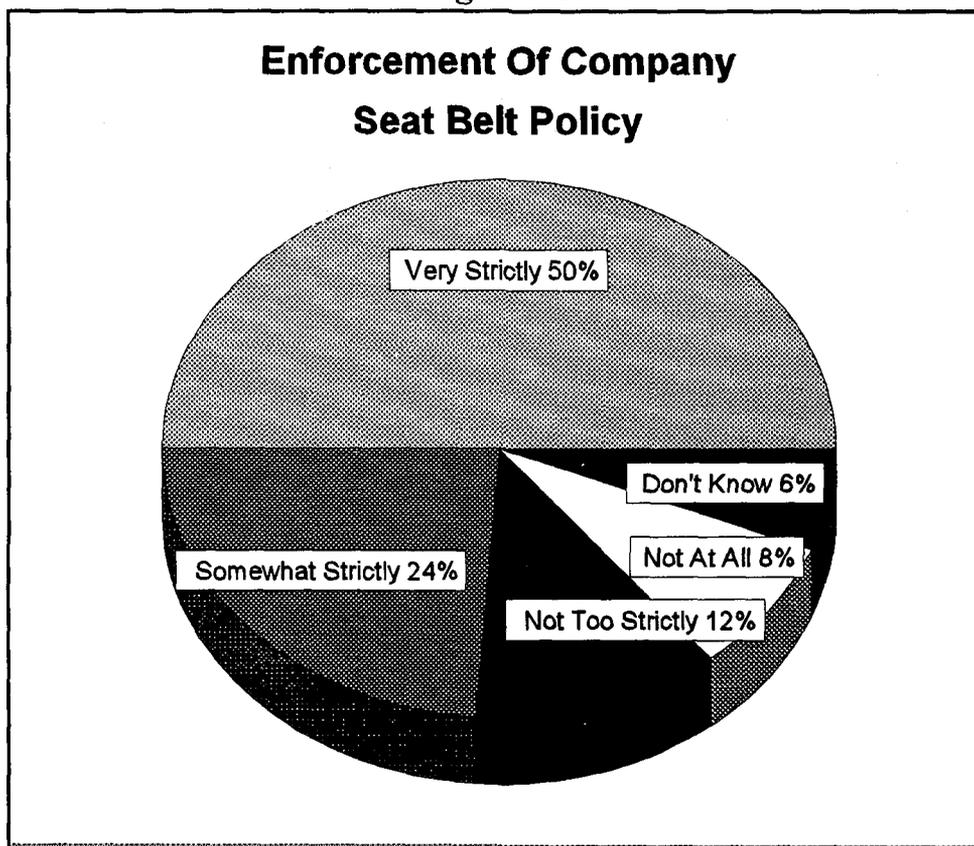
Unweighted N's listed above

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Company Enforcement of Seat Belt Policy

If workers believed that their company had a seat belt policy, they also tended to believe that it was enforced at least to some degree. One-half (50%) of drivers who drove on the job and believed their company had a seat belt policy said that the policy was enforced “very strictly.” Another 24% stated that it was “somewhat strictly” enforced. Only about two persons in ten answered that the policy was not too strictly enforced (12%) or not enforced at all (8%).

Figure 12



Qx: How strictly does your company enforce its policy about wearing seat belts?
Base: Drives a vehicle as part of job and believes the company has a seat belt policy.
Unweighted N=657

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Company enforcement of seat belt policy may take the form of requests, notices, visual checks, warnings, suspensions, dismissals, or fines. Among drivers who drove on the job and reported at least some enforcement of their company seat belt policy, the most frequently identified approaches were those that solicited cooperation from employees without attaching penalties (21%), followed by suspensions or dismissals (19%). Almost as many workers (18%) mentioned that the company “kept an eye out” to check that seat belts were being worn. About one in four persons (24%) who were asked the question either did not know how their company enforced its policy or would not say.

Table 12
How Employer Enforces Seat Belt Policy

Qx: How does your company enforce its seat belt policy?

Base: Drives a vehicle as part of a job and believes company (very, somewhat, or not too strictly) enforces seat belt policy.

Unweighted N=568

| Method | Percent |
|---|---------|
| Ask To Wear (No Penalty Specified) | 21% |
| Boss/supervisor asks employees to wear their seat belts | 13% |
| Written notices/posted instructions (unspecified) | 4% |
| Safety meetings/safety talk every week | 3% |
| Written notice in company vehicle | 2% |
| Warnings | 15% |
| Written reprimand in your file | 9% |
| Boss/supervisor gives daily verbal warning | 5% |
| A warning on your vehicle window | 2% |
| Initial warning | 2% |

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

**TABLE 12 (CONTINUED)
How Employer Enforces Seat Belt Policy**

| | |
|--|-----|
| Suspensions/Dismissals | 19% |
| Dismissed after multiple infractions | 12% |
| Suspended for non-compliance/suspended after warning | 9% |
| Dismissed after one infraction | 1% |
| Any other suspension/dismissal mentions | ** |
| Fined | 3% |
| Fined/fine deducted from paycheck | 3% |
| Miscellaneous | 31% |
| People keep eye out to see/check you are wearing seat belt | 18% |
| Left up to individual/not really enforced | 6% |
| Offender pays ticket | 2% |
| Medical coverage is void if not wearing seat belt | 2% |
| Any other miscellaneous mentions | 6% |
| Don't Know/No Answer | 24% |

** Less than 0.5%

Categories sum to more than 100% because more than one response was allowed.

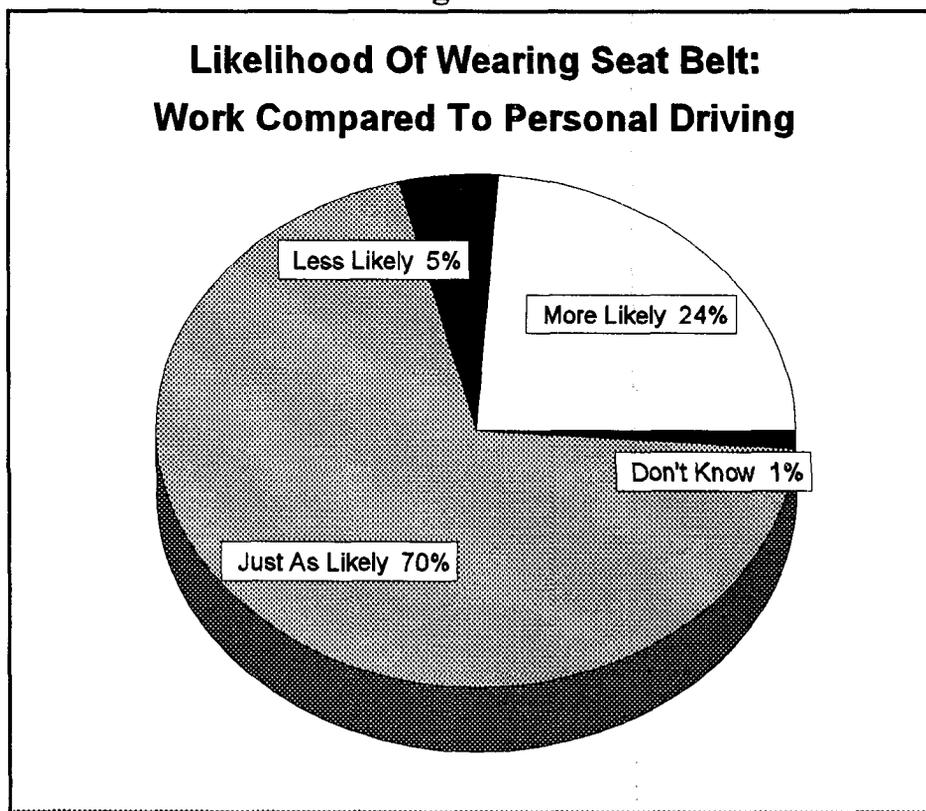
1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Seat Belt Use At Work and Company Policy

Those persons who drove as part of their job were asked if there was any difference in their seat belt use between their work and personal driving. Skipped out of the item were persons who had indicated that they never wore their seat belt when driving.

A majority of drivers (70%) said that there was no difference in their seat belt use when driving on the job as compared to when driving for personal use. However, 24% claimed they were more likely to wear their seat belts on the job, whereas 5% reported that they were less likely to wear them at work.

Figure 13



Qx: Are you more likely, less likely or just as likely to wear your seat belt when driving on the job as compared to when driving for personal use?

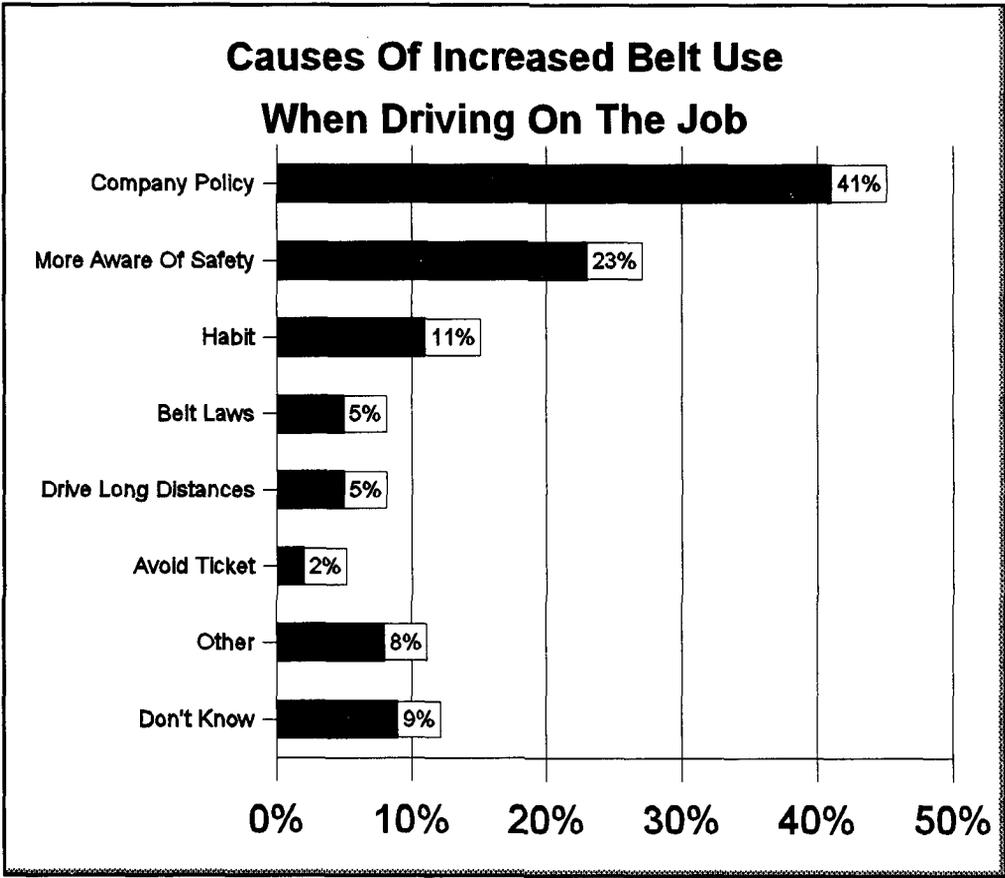
Base: Drives a vehicle as part of job and at least on occasion wears a seat belt.

Unweighted N=1314

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Of those more likely to wear their seat belt when driving on the job, the most frequent reason was because of company policy (41%), followed by an increased awareness of safety (23%). Among the few drivers who said they wore their seat belt less frequently when driving on the job, the single most common reason was that they were in and out of the vehicle all the time (27%).

Figure 14

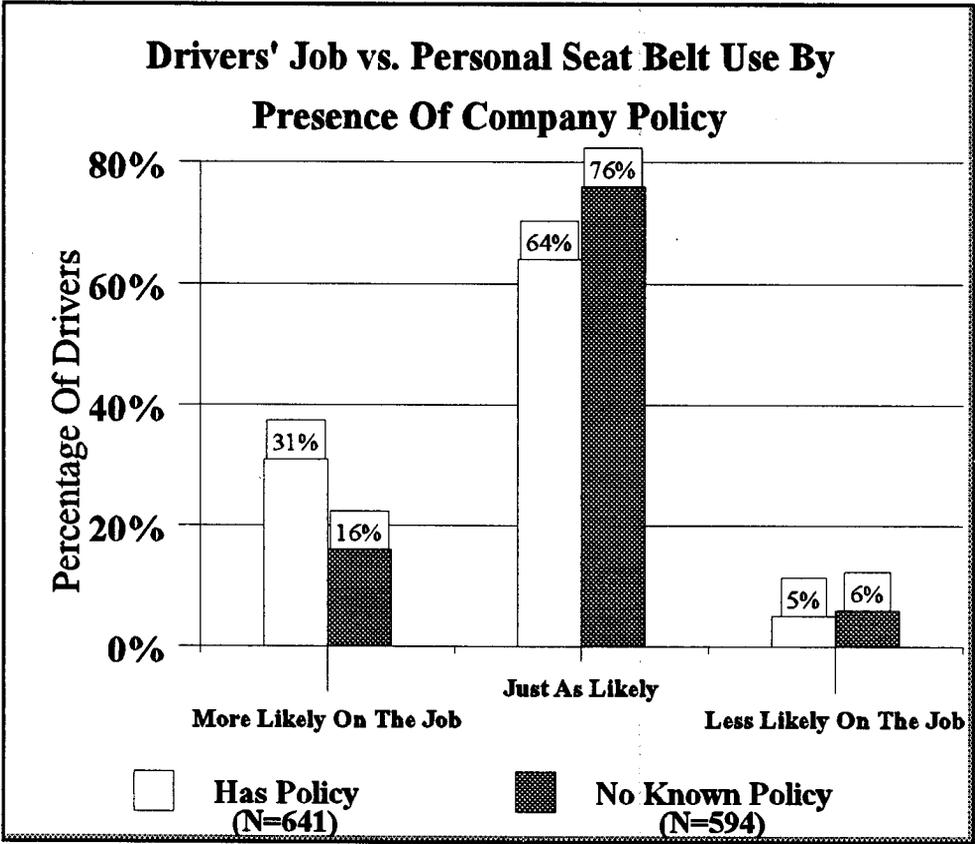


Qx: Why are you more likely to wear your belt when driving on the job?
Base: More likely to wear seat belt when driving on the job as compared to personal driving.
Unweighted N=309
Categories sum to more than 100% because more than one response was allowed.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

A key question is whether or not the presence of a company seat belt policy affects employee seat belt use. The item asking respondents to compare their seat belt use when driving for work to their usage during personal driving provides one means for exploring this issue. Figure 15 compares the responses to this question from drivers who thought their company had a seat belt policy to those who did not think there was a company policy. It shows that drivers were about twice as likely to report higher seat belt use on the job if they believed their company had a seat belt policy (31% to 16%).

Figure 15

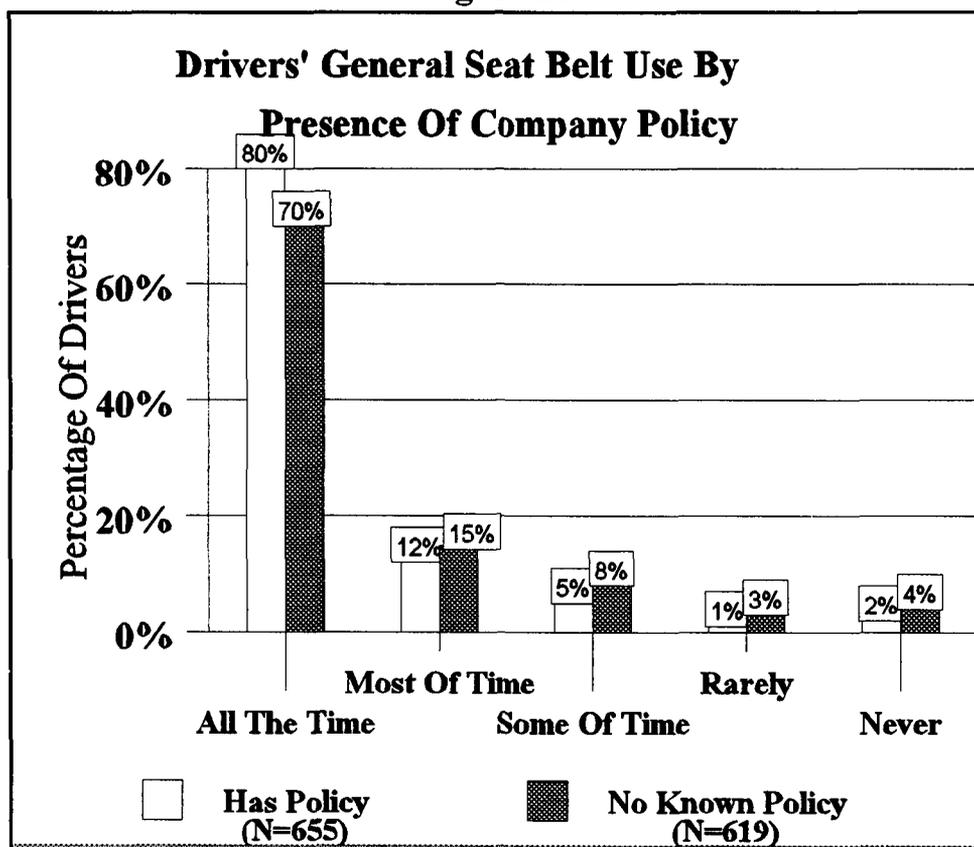


Qx: Does your company or business have a policy requiring seat belt use when driving on the job?
 Qx: Are you more likely, less likely or just as likely to wear your seat belt when driving on the job as compared to when driving for personal use?
 Base: Drives a vehicle as part of job and at least on occasion wears a seat belt.
 Unweighted N's listed above.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Figure 15 assessed whether company policies were associated with reported differences in seat belt usage between work and personal driving. However, it did not address the question of whether the presence of a company seat belt policy affected usage during both types of driving. Figure 16 looks at general reported seat belt usage (i.e., not associated with a particular type of driving) for persons who drove on the job and did, or did not, believe that their company had a seat belt policy. This analysis included persons who said they never wore their seat belts while driving. According to the data, 80% of drivers who thought their company had a policy said they wore their seat belts “all of the time” compared to 70% who did not think there was a company policy.

Figure 16



Qx: When driving this [vehicle], how often do you wear your [lap/shoulder] belt?

Qx: Does your company or business have a policy requiring seat belt use when driving on the job?

Base: Drive a vehicle as part of a job

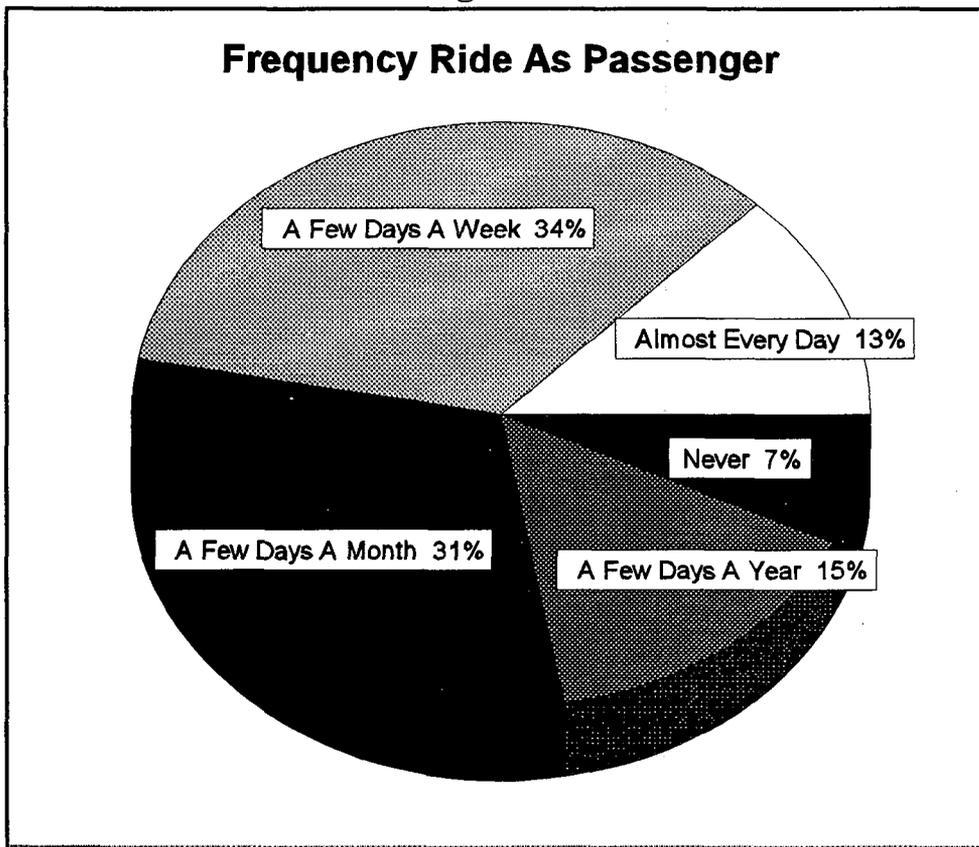
Unweighted N's listed above

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Passenger Use of Seat Belts

More than 90% of the public ride as passengers in motor vehicles at least on occasion. Thirteen percent do so almost every day while larger numbers ride as passengers either a few days a week (34%) or a few days a month (31%).

Figure 17



Qx: How often do you ride as a passenger in any kind of car, van or truck?

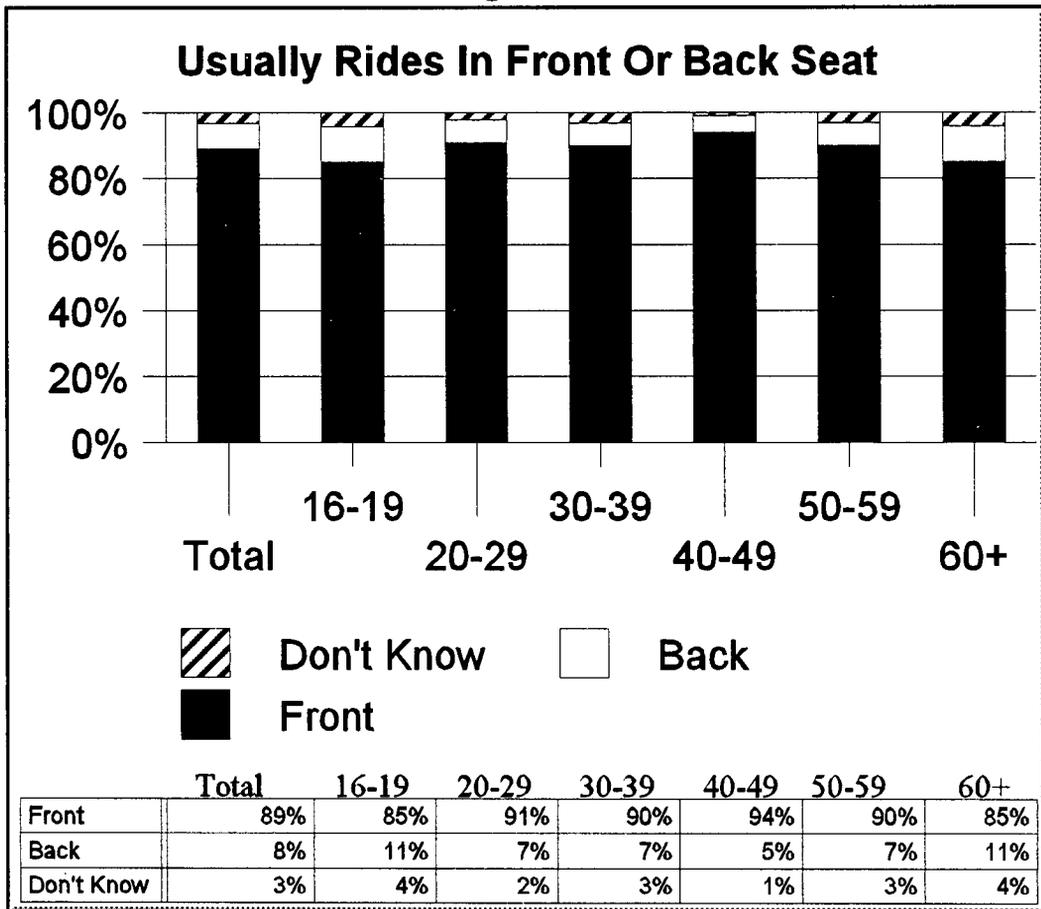
Base: Total population age 16+

Unweighted N=4094

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

The vast majority of persons age 16 and older (89%) usually sit in the front seat when riding as passengers in motor vehicles. Persons ages 16 through 19 (85%) and 60 and older (85%) were least likely to usually sit in the front.

Figure 18



Qx: When you are a passenger, do you usually ride in the front seat or the back seat?

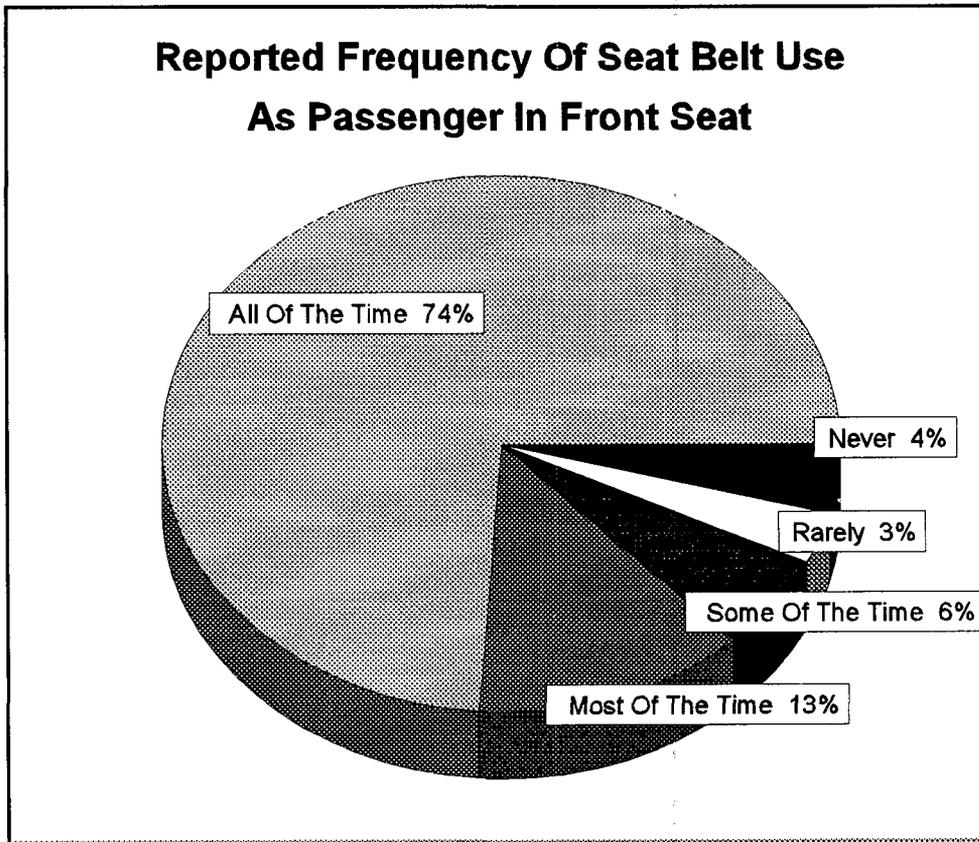
Base: At least sometimes rides as a passenger.

Unweighted N= 3834

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

As noted on page 10, 79% of drivers said that they used their seat belt “all of the time” while driving. Reported seat belt usage was somewhat lower on the front seat passenger side. Just under three-fourths (74%) answered that they wore their seat belt “all of the time” when riding as a passenger in the front seat.

Figure 19



Qx: When riding as a passenger in the front seat how often do you wear your seat belt?

Base: At least sometimes rides as a passenger

Unweighted N=3834

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Seat belt use may be affected by whether a person is sitting in their normal seating position as irregular situations could interfere with established habits. However, for the front seat passenger position, the data showed little difference in reported usage between persons who normally rode in the front as passengers and those who normally rode in the back. Seventy-four percent of persons who normally rode in the front seat as passengers said they always wore their seat belt when riding as front seat passengers. Seventy-one percent of those who normally rode in the back seat said they always wore their seat belt when riding as front seat passengers.

TABLE 13
Frequency Wear Seat Belt As Front Seat Passenger
By Where Usually Ride As Passenger

Qx: When you are a passenger, do you usually ride in the front seat or the back seat?
Qx: When riding as a passenger in the front seat how often do you wear your seat belt?
Base: At least sometimes rides as a passenger.

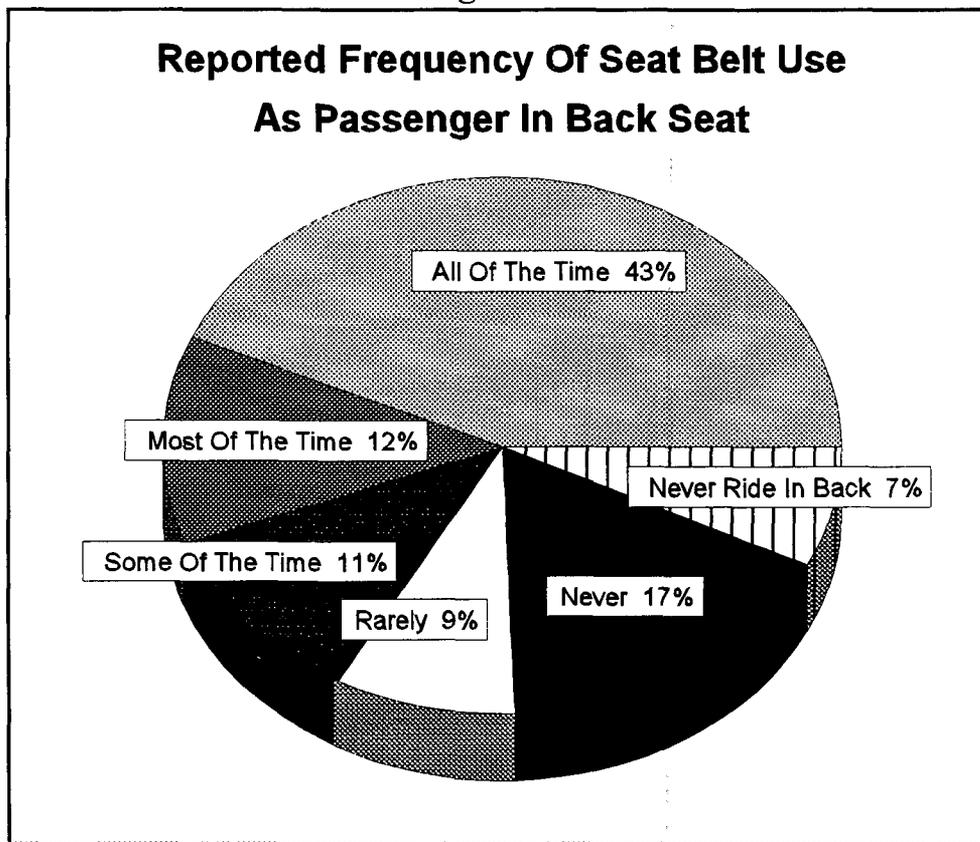
| Frequency of Front Seat Passenger Seat Belt Use | Where Usually Ride As Passenger | | |
|---|---------------------------------|-----------|------------|
| | Front Seat | Back Seat | Don't Know |
| | (N=3449) | (N=266) | (N=116) |
| All Of The Time | 74% | 71% | 78% |
| Most Of The Time | 14% | 13% | 7% |
| Some Of The Time | 6% | 6% | 3% |
| Rarely | 3% | 3% | 2% |
| Never | 4% | 5% | 8% |
| Never Ride In Front Seat | -- | 2% | -- |
| Don't Know | -- | -- | 1% |

-- Zero cases

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Seat belt use was substantially lower in back seat passenger positions. Only 43% of persons said that they always wore their seat belt when riding as a passenger in the back seat. Almost one in five (17%) reported never wearing seat belts in the back seat. It bears repeating, however, that the vast majority of adults usually rode in the front seat (see page 39).

Figure 20



Qx: When riding as a passenger in the back seat how often do you wear your seat belt?

Base: At least sometimes rides as a passenger

Unweighted N=3834

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

As with the front seat (page 41), seat belt use in the back did not vary substantially according to the person's normal seating position. Forty-two percent of those who normally rode in the front seat as passengers said they always wore their seat belt when riding in the back. Forty-six percent of those who normally rode in the back seat said they always wore their seat belt when riding as back seat passengers. Interestingly, for both the front and back seats, reported "all the time" use was higher among persons who usually rode in that seating position. The differences were small, however, and only a small number of persons said they usually rode in the back.

TABLE 14
Frequency Wear Seat Belt As Back Seat Passenger
By Where Usually Ride As Passenger

Qx: When you are a passenger, do you usually ride in the front seat or the back seat?
Qx: When riding as a passenger in the back seat how often do you wear your seat belt?
Base: At least sometimes rides as a passenger.

| Frequency of Back Seat Passenger Seat Belt Use | Where Usually Ride As Passenger | | |
|--|---------------------------------|-----------|------------|
| | Front Seat | Back Seat | Don't Know |
| | (N=3449) | (N=266) | (N=116) |
| All Of The Time | 42% | 46% | 51% |
| Most Of The Time | 12% | 13% | 16% |
| Some Of The Time | 11% | 15% | 12% |
| Rarely | 9% | 11% | 4% |
| Never | 17% | 15% | 15% |
| Never Ride In Back | 8% | -- | 2% |
| Don't Know | * | -- | -- |

* Less than 0.5% -- Zero cases

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

People were fairly consistent in their reported seat belt use as drivers and front seat passengers. Nine in ten (90%) who said they used their seat belt all the time when driving also said they wore their seat belt all the time while riding as front seat passengers. Three-fourths (75%) of those who rarely or never wore their seat belts while driving also rarely or never used them as front seat passengers.

TABLE 15
Frequency Of Seat Belt Use As Driver By
Frequency Of Seat Belt Use As Front Seat Passenger

Qx: When driving this [vehicle], how often do you wear your [lap/shoulder] belt?
Qx: When riding as a passenger in the front seat how often do you wear your seat belt?
Base: Drivers whose primary vehicle has seat belts and who at least sometimes ride as passengers.

| Frequency Of Seat Belt Use as Front Seat Passenger | Belt Use As Driver | | | |
|--|--------------------|------------------|------------------|--------------|
| | All The Time | Most Of The Time | Some Of The Time | Rarely/Never |
| | (N=2718) | (N=409) | (N=160) | (N=177) |
| All Of The Time | 90% | 24% | 12% | 5% |
| Most Of The Time | 7% | 58% | 15% | 5% |
| Some Of The Time | 2% | 13% | 52% | 14% |
| Rarely/Never | 1% | 5% | 21% | 75% |
| Never Ride In Front | * | — | — | 1% |
| Don't Know | * | — | — | — |

* Less than 0.5% — Zero cases

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Even those who normally wore their seat belts in the front seat were less inclined to wear their seat belts in the back. Only 53% of persons who said they always wore seat belts while driving also said they always wore them as back seat passengers. Fewer than one-third of persons who wore seat belts “most of the time” as drivers either always (11%) or most of the time (20%) wore them when riding in the back.

TABLE 16
Frequency Of Seat Belt Use As Driver By
Frequency Of Seat Belt Use As Back Seat Passenger

Qx: When driving this [vehicle], how often do you wear your [lap/shoulder] belt?
Qx: When riding as a passenger in the back seat how often do you wear your seat belt?
Base: Drivers whose primary vehicle has seat belts and who at least sometimes ride as passengers.

| Frequency Of Seat Belt Use As Back Seat Passenger | Belt Use As Driver | | | |
|---|--------------------|------------------|------------------|--------------|
| | All The Time | Most Of The Time | Some Of The Time | Rarely/Never |
| | (N=2718) | (N=409) | (N=160) | (N=177) |
| All Of The Time | 53% | 11% | 4% | 1% |
| Most Of The Time | 13% | 20% | 3% | 1% |
| Some Of The Time | 11% | 13% | 17% | 3% |
| Rarely/Never | 17% | 46% | 68% | 87% |
| Never Ride In Back | 6% | 9% | 8% | 8% |
| Don't Know | * | * | — | — |

* Less than 0.5% – Zero cases

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

1998 SURVEY RESULTS

CHAPTER 2

©

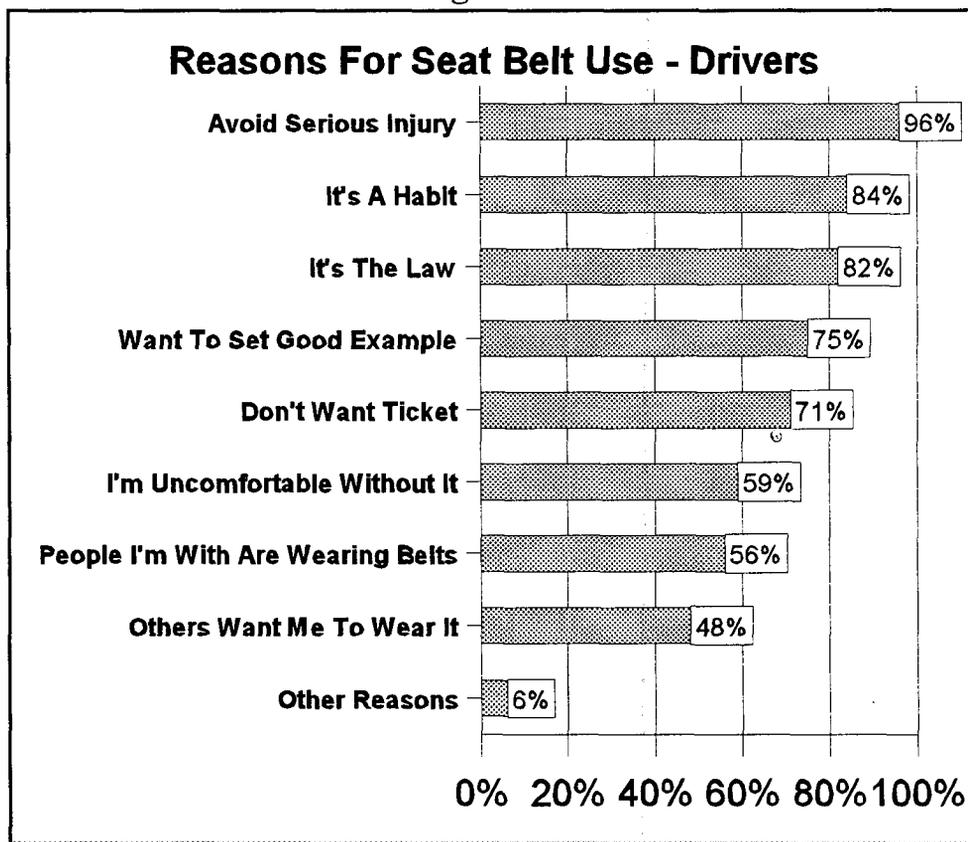
REASONS FOR SEAT BELT USE AND NON-USE

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Reasons For Seat Belt Use

Drivers who wore shoulder or lap belts at least on occasion were asked their reasons for wearing seat belts when they drove. Eight potential reasons for seat belt use were read, one at a time, to respondents. They were asked whether or not each reason was a factor in their use of seat belts. The respondents were then given an opportunity to volunteer other reasons for their seat belt use. Almost all drivers (96%) said that avoiding serious injury was a reason they wore their seat belts. **Injury avoidance ranked first regardless of the group to which persons belonged** (see following pages). The drivers also frequently attributed seat belt use to habit (84%), the law (82%), wanting to set a good example for others (75%), and not wanting a ticket (71%).

Figure 21



Qx: When I wear my seat belt, I do so because

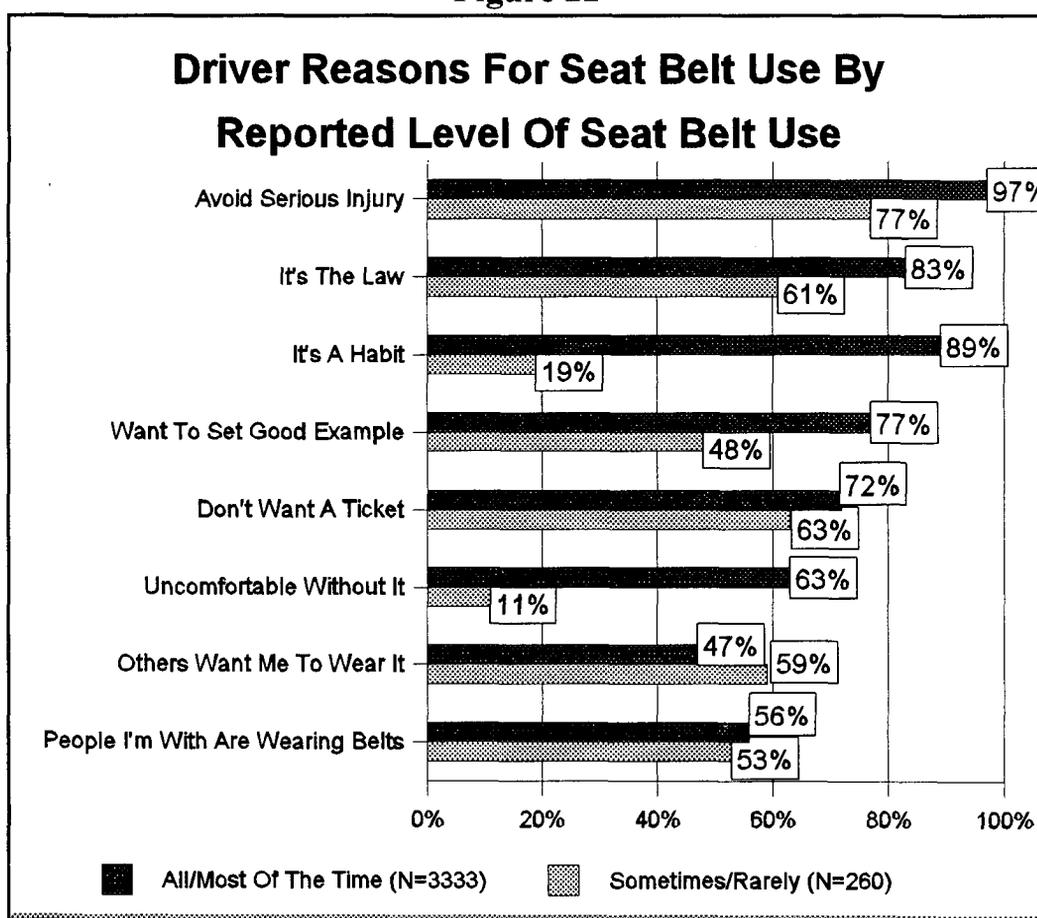
Base: Drivers whose primary vehicle has seat belts, and who at least on occasion wear their seat belt.

Unweighted N=3594

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

While 97% of drivers who said they wore their seat belts “all” or “most” of the time gave injury avoidance as a reason for use, only 77% of those who “sometimes” or “rarely” wore seat belts did the same. Frequent users also were more likely than infrequent users to mention the law, setting a good example, and characteristics of regular use (habit; discomfort from their absence). The only reason mentioned more often by infrequent users (59%) than regular users (47%) was that other people wanted them to wear their seat belt.

Figure 22



Qx: When I wear my seat belt, I do so because

Base: Drivers whose primary vehicle has seat belts, and who at least on occasion wear their seat belt.

Unweighted N's listed above

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Females, on average, gave more reasons than males for their seat belt use, as evidenced by the generally higher percentages. They were particularly more likely to report wearing their seat belt because it was the law (87% to 77%), they wanted to set a good example (80% to 70%), and they were uncomfortable without it (64% to 54%).

Drivers ages 16 through 20 showed more concern about getting a ticket (85%) than did drivers ages 21 to 64 (70%) or 65 and older (68%). They also were more likely than the other age groups to say they wore their seat belt because others wanted them to wear it (55%).

TABLE 17
Driver Reasons For Seat Belt Use By Sex And Age

Qx: When I wear my seat belt, I do so because

Base: Drivers whose primary vehicle has seat belts, and who at least on occasion wear their seat belt.

| Reason | Sex | | Age | | |
|-----------------------------------|----------|----------|---------|----------|---------|
| | Female | Male | 16-20 | 21-64 | 65+ |
| | (N=1902) | (N=1692) | (N=314) | (N=2840) | (N=404) |
| Avoid Serious Injury | 97% | 95% | 97% | 96% | 95% |
| It's A Habit | 87% | 82% | 83% | 84% | 87% |
| It's The Law | 87% | 77% | 86% | 80% | 88% |
| Want To Set Good Example | 80% | 70% | 72% | 76% | 74% |
| Don't Want Ticket | 73% | 69% | 85% | 70% | 68% |
| Uncomfortable Without It | 64% | 54% | 57% | 60% | 57% |
| People I'm With Are Wearing Belts | 57% | 55% | 52% | 55% | 60% |
| Others Want Me To Wear It | 48% | 48% | 55% | 48% | 46% |

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Blacks and Hispanics more frequently cited the law, and the threat of being ticketed, as reasons for seat belt use than did whites and non-Hispanics. They also were more likely to say they wore seat belts in order to set a good example for others. Hispanics were more likely than the other groups to report using their seat belt because the people they were with were wearing seat belts.

TABLE 18
Driver Reasons For Seat Belt Use By Race and Ethnicity

Qx: When I wear my seat belt, I do so because

Base: Drivers whose primary vehicle has seat belts, and who at least on occasion wear their seat belt.

| Reason | Race | | Ethnicity | |
|-----------------------------------|---------|----------|-----------|--------------|
| | Black | White | Hispanic | Non-Hispanic |
| | (N=345) | (N=2770) | (N=302) | (N=3267) |
| Avoid Serious Injury | 97% | 95% | 97% | 95% |
| It's A Habit | 80% | 85% | 85% | 84% |
| It's The Law | 89% | 80% | 89% | 81% |
| Want To Set Good Example | 79% | 74% | 81% | 74% |
| Don't Want Ticket | 81% | 69% | 84% | 70% |
| Uncomfortable Without It | 57% | 59% | 62% | 59% |
| People I'm With Are Wearing Belts | 53% | 55% | 62% | 55% |
| Others Want Me To Wear It | 44% | 49% | 47% | 48% |

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

The lower the education level, the more likely it was that drivers attributed their seat belt use to the law, not wanting to get a ticket, wanting to set a good example, and the group norm (i.e., the people they were with were wearing seat belts). Conversely, persons with college experience were more likely than those with less years of formal education to refer to internally-centered attributes of personal behavior – habit, and not feeling comfortable when traveling unbuckled.

TABLE 19
Driver Reasons For Seat Belt Use By Education

Qx: When I wear my seat belt, I do so because

Base: Drivers whose primary vehicle has seat belts, and who at least on occasion wear their seat belt.

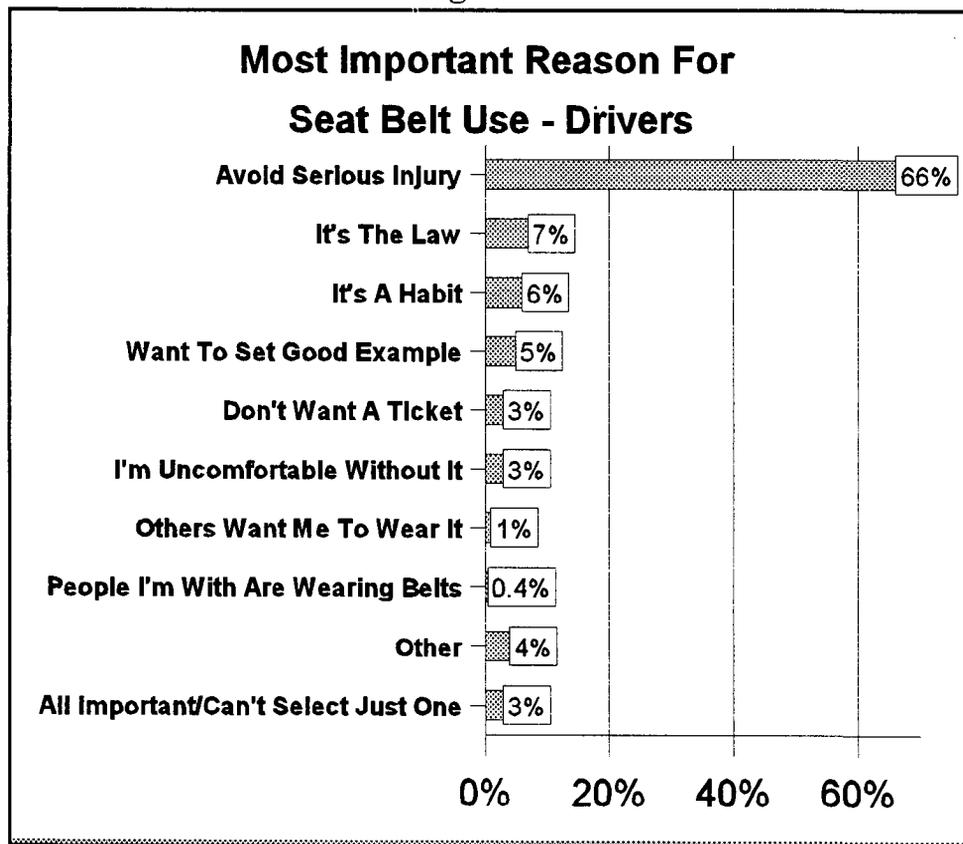
| Reason | Education | | | |
|-----------------------------------|-----------------------|------------------|--------------|--------------|
| | Less Than High School | High School Grad | Some College | College Grad |
| | (N=365) | (N=1109) | (N=914) | (N=1177) |
| Avoid Serious Injury | 96% | 95% | 95% | 96% |
| It's A Habit | 82% | 81% | 84% | 89% |
| It's The Law | 89% | 85% | 81% | 76% |
| Want To Set Good Example | 79% | 76% | 75% | 72% |
| Don't Want Ticket | 80% | 74% | 71% | 64% |
| Uncomfortable Without It | 52% | 56% | 61% | 63% |
| People I'm With Are Wearing Belts | 61% | 59% | 53% | 52% |
| Others Want Me To Wear It | 47% | 50% | 47% | 47% |

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Most Important Reason For Seat Belt Use

Although a majority of drivers who wore seat belts identified multiple reasons for usage, they tended to give greatest weight to safety considerations. Almost two-thirds of drivers (66%) said that avoiding serious injury was the most important reason why they wore their seat belt. No other single factor garnered more than 7% of the driver population when drivers were asked which reason was most important.

Figure 23



Qx: Of the following reasons you just gave me for wearing your seat , which is the most important?

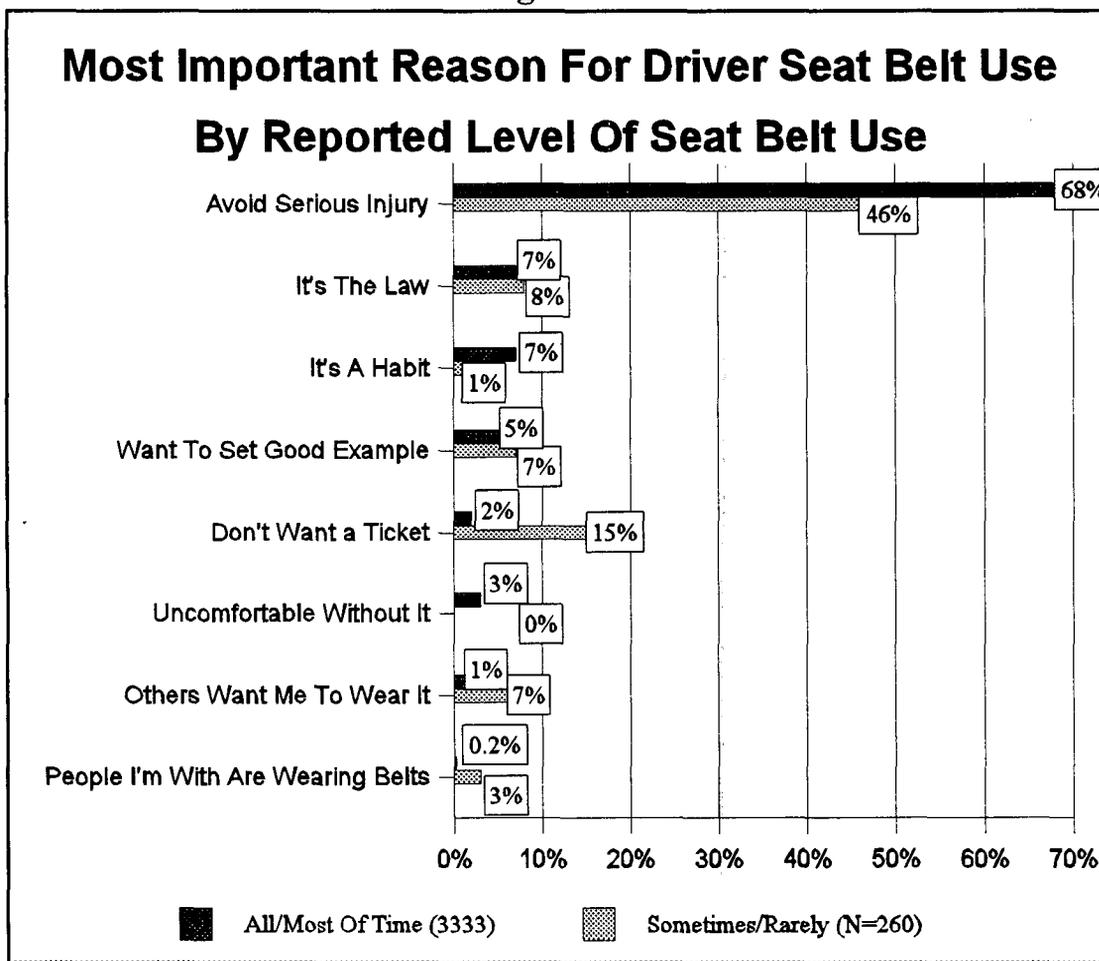
Base: Drivers whose primary vehicle has seat belts, and who at least on occasion wear their seat belt.

Unweighted N=3594

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

The primary reason drivers gave for wearing their seat belt differed according to the reported level of belt usage. About two-thirds (68%) of drivers who “always” or “most of the time” used their belts said that avoiding injury was their most important reason, compared to less than half (46%) of drivers who only rarely/sometimes wore their belts. Not wanting a ticket was more of an issue with the infrequent users (15%) than those who said they usually wore their belts (2%).

Figure 24



Qx: Of the following reasons you just gave me for wearing your seat belt, which is the most important?

Base: Drivers whose primary vehicle has seat belts, and who at least on occasion wear their seat belt.

Unweighted N's listed above

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

The survey found little difference between males and females, and between age groups, in what they considered their most important reason for wearing seat belts. Perhaps the most noticeable difference was slightly higher concern over ticketing by the youngest age group, although this still only amounted to 7%.

TABLE 20
Most Important Reason For Driver Seat Belt Use By Sex And Age

Qx: Of the following reasons you just gave me for wearing your seat belt, which is the most important?

Base: Drivers whose primary vehicle has seat belts, and who at least on occasion wear their seat belt.

| Reason | Sex | | Age | | |
|---|----------|----------|---------|----------|---------|
| | Female | Male | 16-20 | 21-64 | 65+ |
| | (N=1902) | (N=1692) | (N=314) | (N=2840) | (N=404) |
| Avoid Serious Injury | 67% | 65% | 68% | 67% | 64% |
| It's The Law | 7% | 8% | 7% | 7% | 8% |
| It's A Habit | 6% | 6% | 7% | 6% | 8% |
| Want To Set Good Example For Others | 6% | 4% | 4% | 6% | 4% |
| Don't Want Ticket | 3% | 4% | 7% | 3% | 2% |
| Uncomfortable Without It | 3% | 2% | 4% | 3% | 2% |
| Others Want Me To Wear It | 1% | 1% | 1% | 1% | 1% |
| People I'm With Are Wearing Belts | * | * | * | * | - |
| Other | 4% | 4% | 2% | 4% | 4% |
| Can't Say One Is Most Important/All Are Important | 3% | 3% | - | 3% | 7% |

* Less than 0.5% - Zero cases

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Blacks were less likely to consider injury avoidance their primary reason for seat belt use (55%) compared to other groups. In addition, blacks and Hispanics were about twice as likely to cite the law as their major reason for seat belt use compared to whites and non-Hispanics, although the overall percentages were low.

TABLE 21
Most Important Reason For Driver Seat Belt Use
By Race and Ethnicity

Qx: Of the following reasons you just gave me for wearing your seat belt, which is the most important?

Base: Drivers whose primary vehicle has seat belts, and who at least on occasion wear their seat belt.

| Reason | Race | | Ethnicity | |
|---|---------|----------|-----------|--------------|
| | Black | White | Hispanic | Non-Hispanic |
| | (N=345) | (N=2770) | (N=302) | (N=3267) |
| Avoid Serious Injury | 55% | 68% | 65% | 66% |
| It's A Habit | 8% | 6% | 4% | 6% |
| It's The Law | 14% | 6% | 13% | 7% |
| Want To Set Good Example | 6% | 5% | 5% | 5% |
| Don't Want Ticket | 4% | 3% | 4% | 3% |
| Uncomfortable Without It | 4% | 3% | 2% | 3% |
| People I'm With Are Wearing Belts | 1% | * | - | * |
| Others Want Me To Wear It | 1% | 1% | - | 1% |
| Other | 5% | 4% | 3% | 4% |
| Can't Say One Is Most Important/All Are important | 2% | 3% | 5% | 3% |

* Less than 0.5% - Zero cases

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

The more years of formal education that persons had, the more likely they were to attribute their seat belt use primarily to injury avoidance. At the same time, they were less likely than persons with fewer years of schooling to cite the law as their main reason for seat belt usage.

TABLE 22
Most Important Reason For Driver Seat Belt Use By Education

Qx: Of the following reasons you just gave me for wearing your seat belt, which is the most important?

Base: Drivers whose primary vehicle has seat belts, and who at least on occasion wear their seat belt.

| Reason | Education | | | |
|---|-----------------------|------------------|--------------|--------------|
| | Less Than High School | High School Grad | Some College | College Grad |
| | (N=365) | (N=1109) | (N=914) | (N=1177) |
| Avoid Serious Injury | 57% | 62% | 68% | 73% |
| It's A Habit | 7% | 6% | 7% | 5% |
| It's The Law | 13% | 10% | 5% | 4% |
| Want To Set Good Example | 5% | 6% | 6% | 4% |
| Don't Want Ticket | 3% | 5% | 3% | 3% |
| Uncomfortable Without It | 3% | 2% | 3% | 3% |
| People I'm With Are Wearing Belts | * | * | * | * |
| Others Want Me To Wear It | 1% | 1% | 1% | 1% |
| Other | 4% | 3% | 5% | 5% |
| Can't Say One Is Most Important/All Are Important | 5% | 3% | 2% | 3% |

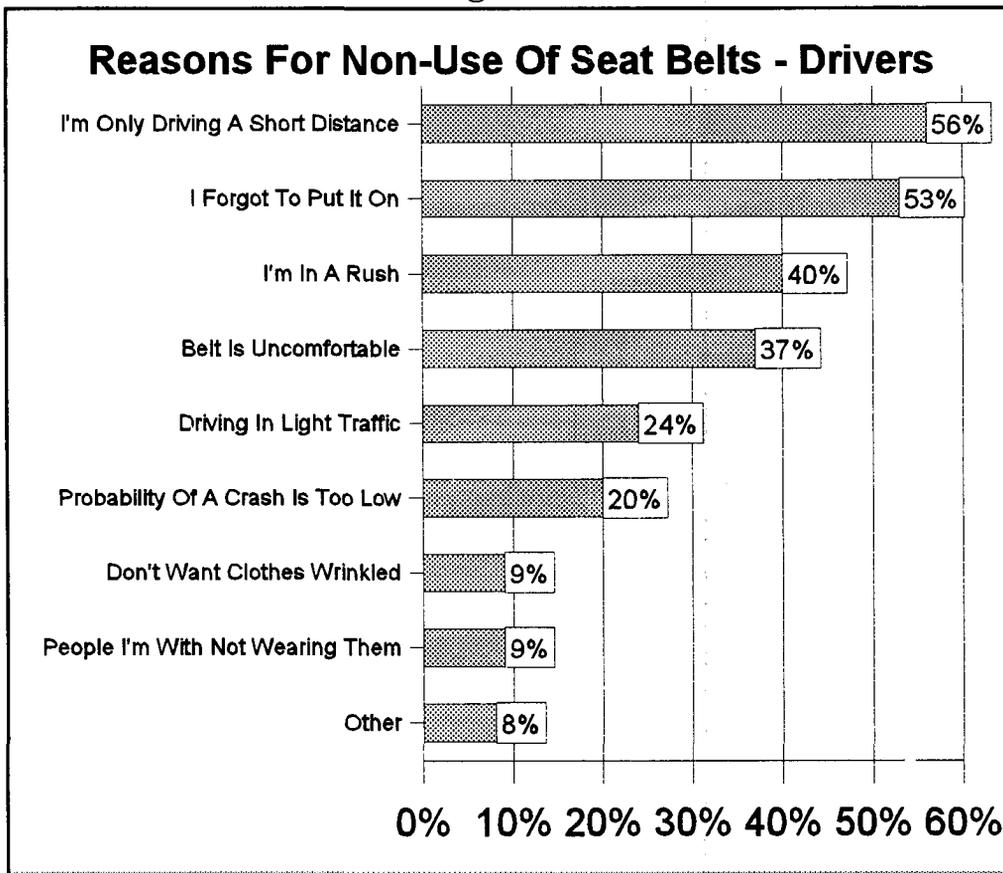
* Less than 0.5%

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Reasons For Non-Use Of Seat Belts

Drivers who did not always wear their seat belt during the past year were asked about their reasons for non-use, using methods identical to those described on page 48 (i.e., getting respondents to react to specific reasons, and then giving them the opportunity to add to the list). The most frequent reasons given for non-use by drivers were that they were only going a short distance (56%) or they forgot (53%). Two of every five (40%) said that they were in a rush, while nearly as many (37%) attributed non-use to discomfort from the seat belt.

Figure 25



Qx: Sometimes I do not wear my seat belt because.

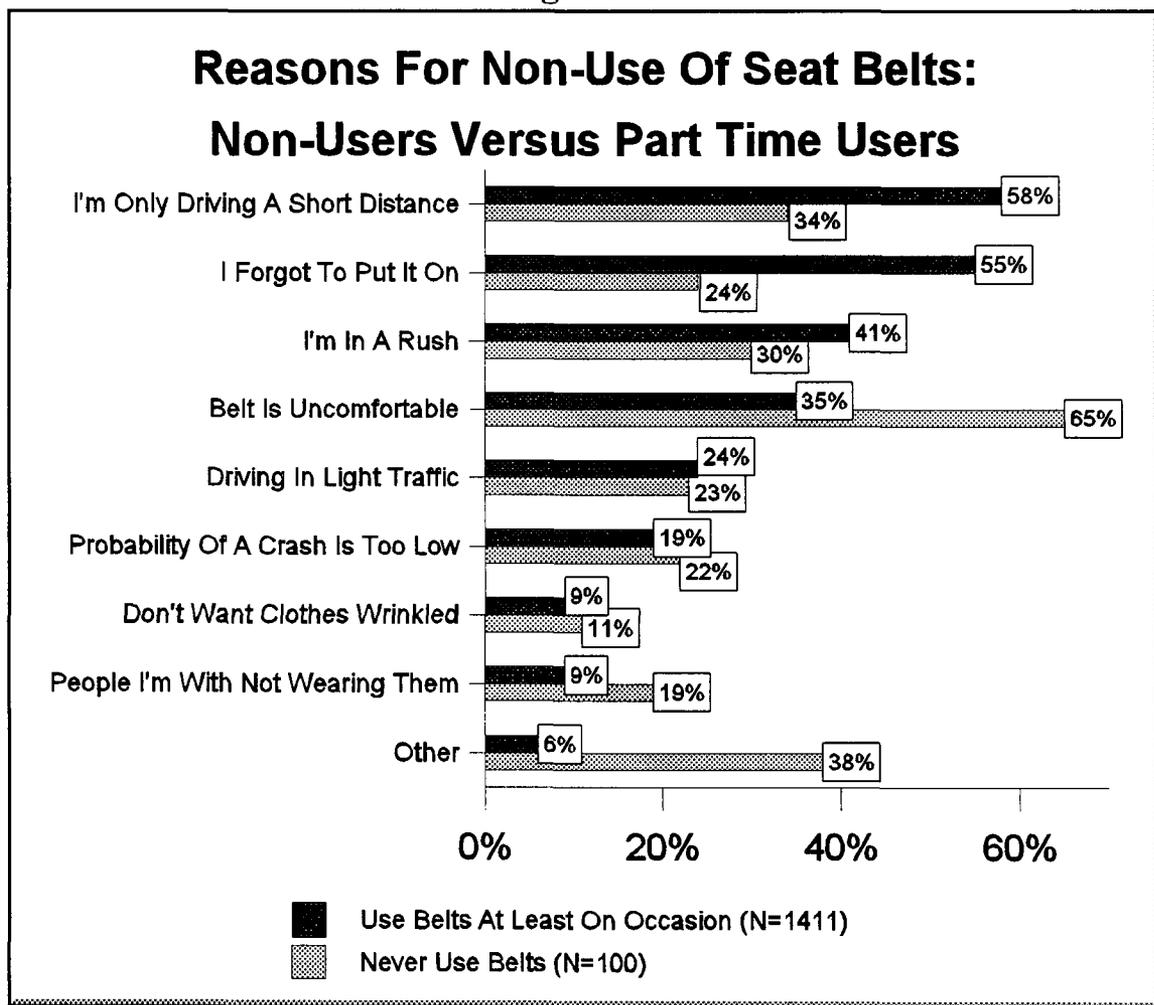
Base: Drivers whose primary vehicle has seat belts, and who at least on occasion do not wear their seat belt.

Unweighted N=1521

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

The vast majority of the non-use described on the previous page came from persons who indicated at least some use of seat belts. However, Figure 25 also included a small number of persons who said that they never wore their seat belt while driving. Reasons for non-use among adamant non-users may differ from that of part time users. Figure 26 suggests that is the case. Although the Figure is based on very small numbers (100 cases), it shows that discomfort (65%) and “Other” reasons (38%) were far more predominant among those who never wore seat belts.

Figure 26



Qx: Sometimes I do not wear my seat belt because.

Base: Drivers whose primary vehicle has seat belts, and who at least on occasion do not wear their seat belt.

Unweighted N's listed above

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Differences between males and females tended to reflect lesser perception of risk by males (e.g., low probability of crash, driving in light traffic, forgetting). Also, females were slightly more likely than males to cite discomfort or wrinkled clothes. Observed age differences were more problematic due to relatively few young driver cases. The youngest drivers were more apt than older drivers to say they forgot or were in a rush, and seemed more likely than older drivers to be influenced by whether their companions wore belts.

TABLE 23
Driver Reasons For Non-Use Of Seat Belts By Sex And Age

Qx: Sometimes I do not wear my seat belt because

Base: Drivers whose primary vehicle has seat belts, and who at least on occasion do not wear their seat belt.

| Reason | Sex | | Age | | |
|--|---------|---------|---------|----------|---------|
| | Female | Male | 16-20 | 21-64 | 65+ |
| | (N=686) | (N=835) | (N=172) | (N=1207) | (N=132) |
| I'm Only Driving A Short Distance | 56% | 56% | 50% | 56% | 62% |
| I Forgot To Put It On | 50% | 55% | 60% | 53% | 47% |
| I'm In A Rush | 38% | 41% | 49% | 40% | 35% |
| The Seat Belt Is Uncomfortable | 39% | 35% | 37% | 38% | 32% |
| I'm Driving In Light Traffic | 20% | 27% | 26% | 24% | 22% |
| The Probability Of Being In A Crash Is Too Low | 13% | 24% | 17% | 20% | 21% |
| Don't Want My Clothes Wrinkled | 12% | 7% | 8% | 10% | 4% |
| People I Am With Are Not Wearing Belts | 7% | 11% | 15% | 9% | 5% |
| Other | 6% | 9% | 4% | 9% | 5% |

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

The number of blacks and Hispanics in the survey who reported non-use of seat belts was quite small. Thus, caution should be exercised in interpreting the statistics. Whites were more likely than blacks to attribute non-use to forgetting or to their driving only a short distance. Hispanics identified discomfort less often than did the other groups, but they may be more prone than others to ignore seat belts when driving in light traffic. Blacks and Hispanics were about twice as likely as whites and non-Hispanics to claim they did not wear their seat belts because they did not want their clothes wrinkled.

TABLE 24
Driver Reasons For Non-Use Of Seat Belts By Race and Ethnicity

Qx: Sometimes I do not wear my seat belt because

Base: Drivers whose primary vehicle has seat belts, and who at least on occasion do not wear their seat belt.

| Reason | Race | | Ethnicity | |
|--|---------|----------|-----------|--------------|
| | Black | White | Hispanic | Non-Hispanic |
| | (N=155) | (N=1183) | (N=110) | (N=1400) |
| I'm Only Driving A Short Distance | 51% | 58% | 51% | 56% |
| I Forgot To Put It On | 46% | 55% | 51% | 53% |
| I'm In A Rush | 39% | 41% | 42% | 40% |
| The Seat Belt Is Uncomfortable | 37% | 37% | 29% | 37% |
| I'm Driving In Light Traffic | 26% | 23% | 29% | 23% |
| The Probability Of Being In a Crash Is Too Low | 17% | 21% | 19% | 19% |
| Don't Want My Clothes Wrinkled | 17% | 8% | 15% | 9% |
| People I Am With Are Not Wearing Belts | 11% | 9% | 11% | 9% |
| Other | 3% | 8% | 9% | 8% |

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Seat belt non-users who had not completed high school composed relatively few cases in the study, thus once again readers should exercise caution in interpreting the findings. The limited data suggested that this group was somewhat more likely than persons having additional years of formal schooling to refer to forgetting, discomfort, and non-use by their companions as reasons for their own lack of seat belt use.

TABLE 25
Driver Reasons For Non-Use Of Seat Belts By Education

Qx: Sometimes I do not wear my seat belt because

Base: Drivers whose primary vehicle has seat belts, and who at least on occasion do not wear their seat belt.

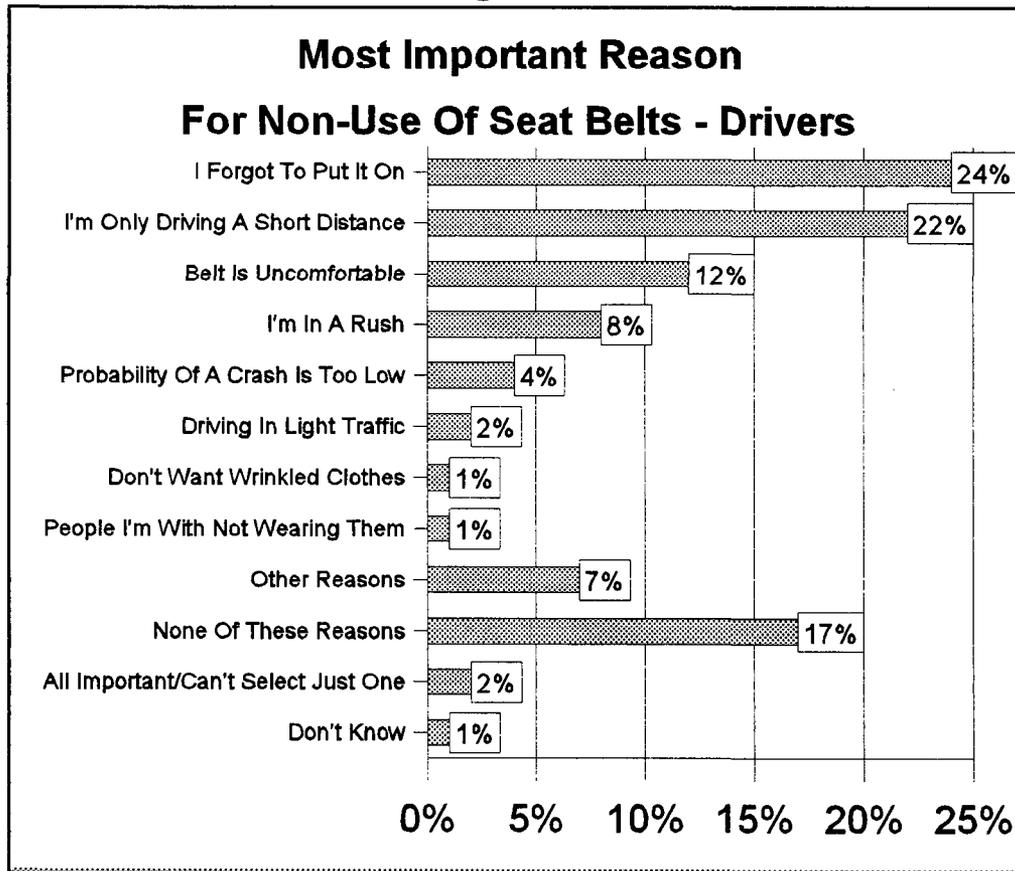
| Reason | Education | | | |
|--|-----------------------|------------------|--------------|--------------|
| | Less Than High School | High School Grad | Some College | College Grad |
| | (N=165) | (N=547) | (N=394) | (N=405) |
| I'm Only Driving A Short Distance | 55% | 54% | 56% | 59% |
| I Forgot To Put It On | 60% | 52% | 56% | 49% |
| I'm In A Rush | 41% | 41% | 40% | 36% |
| The Seat Belt Is Uncomfortable | 47% | 39% | 36% | 29% |
| I'm Driving In Light Traffic | 23% | 26% | 22% | 23% |
| The Probability Of Being In A Crash Is Too Low | 19% | 19% | 20% | 21% |
| Don't Want My Clothes Wrinkled | 8% | 8% | 8% | 12% |
| People I Am With Are Not Wearing Belts | 15% | 9% | 6% | 10% |
| Other | 4% | 9% | 8% | 8% |

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Most Important Reason For Non-Use Of Seat Belts

The most important reasons given for not wearing seat belts were usually that they forgot (24%) or were driving just a short distance (22%). These responses tend to be interpreted as reflecting low risk perception. Forgetting suggests there wasn't anything important enough to remind them to wear the seat belt (e.g., perceived risk cues). Short distances are often viewed by persons as "safe" trips, particularly if they involve traveling in familiar terrain that has been navigated safely many times before. About one in six persons (17%) did not agree that any of the listed reasons applied to them and also did not volunteer any reason.

Figure 27



Qx: Of the following reasons you just gave me for not wearing your seat belt, which is the most important?

Base: Drivers whose primary vehicle has seat belts, and who at least on occasion do not wear their seat belt.

Unweighted N=1521

TABLE 26
Most Important Reason For Non-Use Of Seat Belt:
Verbatim “Other” Reasons Reported* By Non-Users

Qx: Of the following reasons you just gave me for not wearing your seat belt, which is the most important?

Base: Non-users of seat belts who said that some “other” reason besides those read to them was the most important reason for their non-use.

| | |
|---|--|
| <p>I don't believe in them. I think they're a death trap.</p> <p>Shoulder strap feels [like it's] choking me.</p> <p>Because I don't like somebody telling me I have to.</p> <p>Don't believe in it.</p> <p>Lost my best friend wearing one and I get claustrophobic.</p> <p>Lives seat belt takes.</p> <p>It's my choice if I want to wear it or not, not the government's.</p> <p>Just don't wear it, no matter what vehicle it is.</p> <p>Had family member die in an accident and they had their seat belt on.</p> <p>Violation of my rights.</p> <p>I just never put it [on] even though I'm breaking the law. I am not in the habit.</p> <p>If it's my time it's my time.</p> <p>Had a sister in a bad car wreck and if she had her belt on she wouldn't be alive today.</p> <p>I just don't want to.</p> <p>Too many friends have died in car accidents with their seat belts on.</p> <p>Do not like them. Feel confined.</p> <p>Don't like them and they are uncomfortable.</p> | <p>Seen enough wrecks where seat belts were harmful.</p> <p>Because I feel it will not save my life.</p> <p>Not wanting to get caught trying to get out of my car.</p> <p>Just don't want to wear it.</p> <p>Friend of mine was in an accident and seat belt wrapped around his neck and choked.</p> <p>I don't trust them.</p> <p>Just because I know I have the chance of being killed because I can't get it undone.</p> <p>Afraid of being trapped in rig.</p> <p>Never used seat belts so I just got used to not wearing them.</p> <p>Because it's against my constitutional rights.</p> <p>I was in a wreck in which if I had the seat belt on I would of died.</p> <p>Not in a habit of wearing a seat belt.</p> <p>Don't like the law. Pure case of Bill of Rights abuse.</p> <p>Air bags. You have a choice.</p> <p>I've had some friends who got killed in a wreck, not because of the wreck but because the car burned up and they had their seat belts on.</p> <p>I just don't ever wear it.</p> |
|---|--|

**Because of their self-report nature, the statements may be inaccurate when they refer to specific incidents.*

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

The largest differences between the sexes in primary reason for non-use of seat belts were that males more often attributed non-use to forgetting (26% to 20%) while females were almost twice as likely as males to cite discomfort (16% to 9%). Being in a rush was more prevalent among drivers ages 16 through 20 (15%) compared to older motorists, although this finding was based on only a small number of cases for those in the youngest age group.

TABLE 27
Most Important Reason For Driver Non-Use Of Seat Belts By Sex And Age

Qx: Of the following reasons you just gave me for not wearing your seat belt, which is the most important?

Base: Drivers whose primary vehicle has seat belts, and who at least on occasion do not wear their seat belt.

| Reason | Sex | | Age | | |
|---------------------------------------|---------|---------|---------|----------|---------|
| | Female | Male | 16-20 | 21-64 | 65+ |
| | (N=686) | (N=835) | (N=172) | (N=1207) | (N=132) |
| I Forgot To Put It On | 20% | 26% | 25% | 23% | 27% |
| I'm Only Driving A Short Distance | 22% | 22% | 18% | 22% | 25% |
| Belt Is Uncomfortable | 16% | 9% | 13% | 12% | 13% |
| I'm In A Rush | 8% | 8% | 15% | 7% | 2% |
| Probability Of A Crash Is Too Low | 2% | 5% | 2% | 4% | 4% |
| Driving In Light Traffic | 1% | 3% | 2% | 3% | 1% |
| Don't Want Wrinkled Clothes | 2% | 1% | 1% | 1% | 1% |
| People I'm With Are Not Wearing Belts | * | 1% | 1% | 1% | 1% |
| Other Reason | 6% | 7% | 2% | 7% | 5% |

* Less than 0.5%

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

As with age, there were relatively few cases in some of the racial and ethnic categories, making analysis of the primary reason for non-use of seat belts somewhat problematic. A curiosity was the small percentage of Hispanics (3%), compared to the other groups, who were reacting primarily to discomfort.

TABLE 28
Most Important Reason For Driver Non-Use Of Seat Belts
By Race and Ethnicity

Qx: Of the following reasons you just gave me for not wearing your seat belt, which is the most important?

Base: Drivers whose primary vehicle has seat belts, and who at least on occasion do not wear their seat belt.

| Reason | Race | | Ethnicity | |
|--|---------|----------|-----------|--------------|
| | Black | White | Hispanic | Non-Hispanic |
| | (N=155) | (N=1183) | (N=110) | (N=1400) |
| I Forgot To Put It On | 19% | 25% | 29% | 23% |
| I'm Only Driving A Short Distance | 19% | 22% | 23% | 22% |
| Belt Is Uncomfortable | 14% | 12% | 3% | 13% |
| I'm In A Rush | 11% | 7% | 8% | 8% |
| Probability Of A Crash Is Too Low | 3% | 4% | 3% | 4% |
| Driving In Light Traffic | 5% | 2% | 5% | 2% |
| Don't Want Wrinkled Clothes | 2% | 1% | 1% | 1% |
| People I Am With Are Not Wearing Belts | 1% | 1% | — | 1% |
| Other Reason | 2% | 7% | 5% | 7% |

- Zero cases

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

The least educated drivers were more likely than drivers who had more years of formal schooling to attribute non-use primarily to discomfort (19%) or being in a rush (12%). However, there were only 165 respondents in that group. Those with the most education were more likely than the others to respond that the most important reason why they did not wear their seat belt was because they were only driving a short distance (27%).

TABLE 29
Most Important Reason For Driver Non-Use Of Seat Belts By Education

Qx: Of the following reasons you just gave me for not wearing your seat belt, which is the most important?

Base: Drivers whose primary vehicle has seat belts, and who at least on occasion do not wear their seat belt.

| Reason | Education | | | |
|--|-----------------------|------------------|--------------|--------------|
| | Less Than High School | High School Grad | Some College | College Grad |
| | (N=165) | (N=547) | (N=394) | (N=405) |
| I Forgot To Put It On | 27% | 24% | 23% | 23% |
| I'm Only Driving A Short Distance | 19% | 20% | 21% | 27% |
| Belt Is Uncomfortable | 19% | 14% | 11% | 7% |
| I'm In A Rush | 12% | 7% | 9% | 6% |
| Probability Of A Crash Is Too Low | 3% | 3% | 4% | 5% |
| Driving In Light Traffic | 1% | 3% | 1% | 3% |
| Don't Want Wrinkled Clothes | - | 1% | 1% | 1% |
| People I Am With Are Not Wearing Belts | * | * | * | 1% |
| Other Reason | 4% | 7% | 6% | 8% |

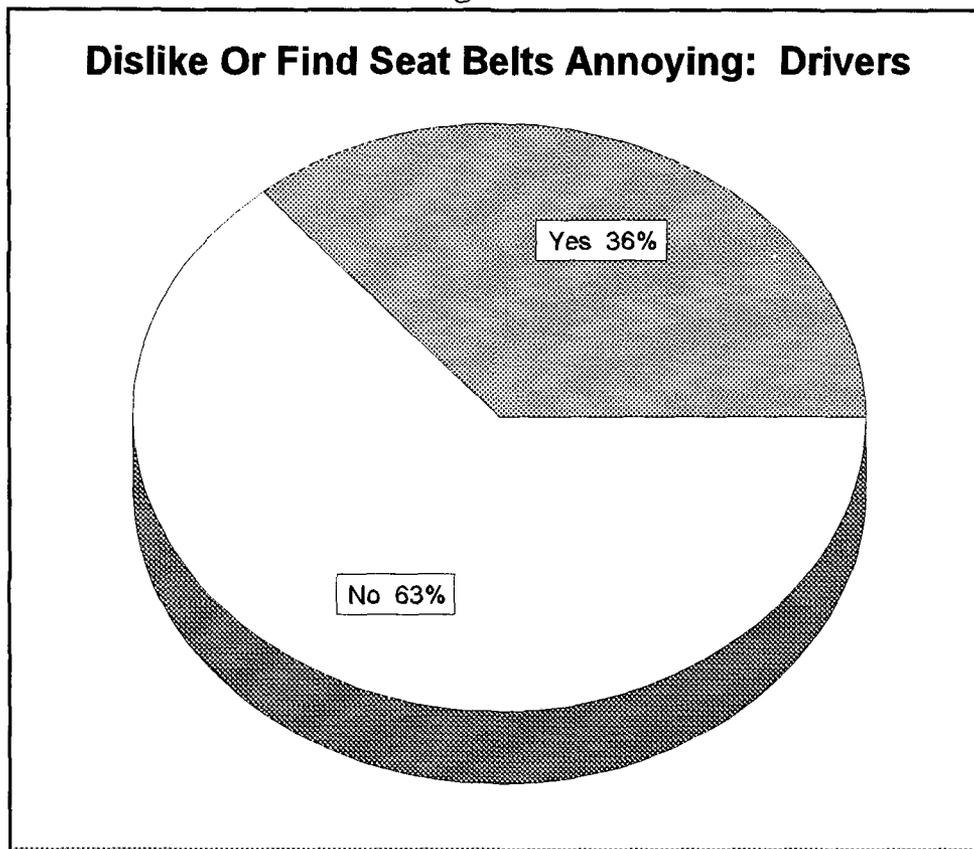
*Less than 0.5% - Zero cases

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

What Drivers Dislike Or Find Annoying About Seat Belts

All drivers, whether or not they wore their seat belts regularly, were asked if there was anything that they particularly disliked or found annoying about wearing them. More than one-third (36%) answered "Yes." Almost all the rest responded that there was not any particular thing they disliked (63%). Less than 1 percent (0.2%) said that they did not know, or else refused to respond.

Figure 29



Qx: Is there anything that you particularly dislike or find annoying about wearing your seat belt?

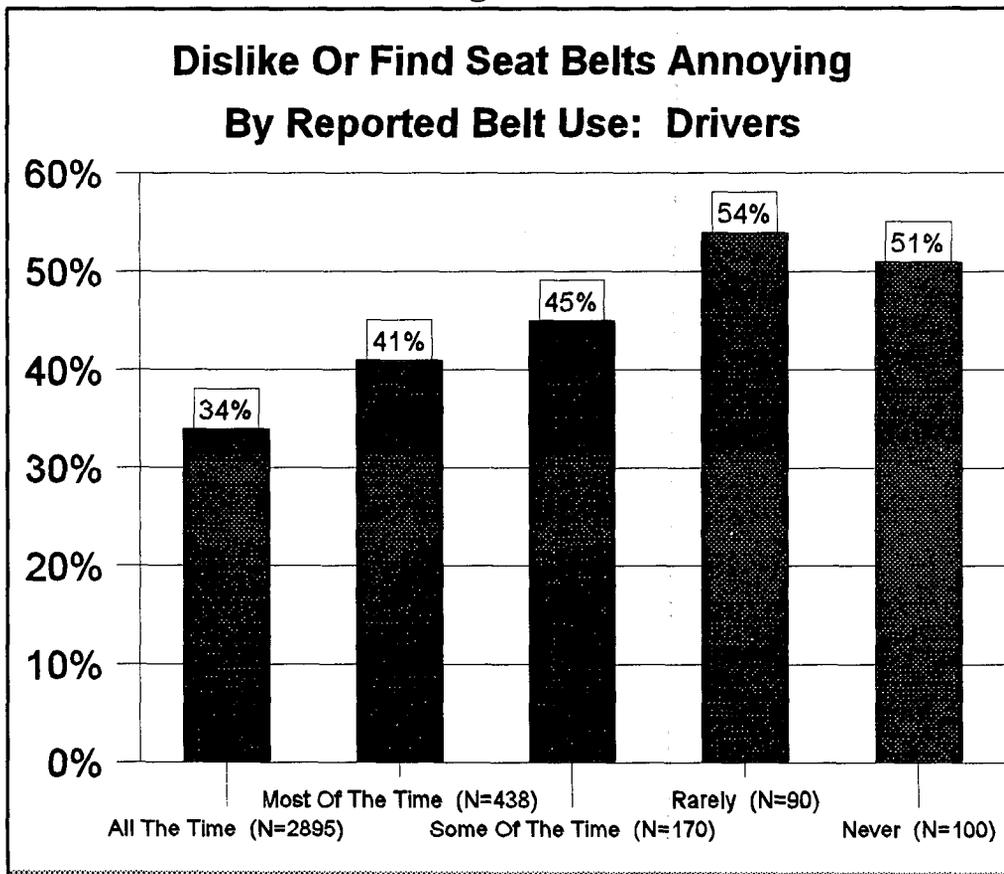
Base: Drives a motor vehicle that has seat belts.

Unweighted N=3703

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Not surprisingly, persons who infrequently wore their seat belt were most likely to report annoyances. Whereas 34% of drivers who reported wearing their seat belt “all of the time” while driving also said there was something particularly annoying about the belt, 41% of “most of the time” users and 45% of “sometime” users voiced similar complaints. Slightly more than one-half of those who rarely or never wore their seat belt said that there was something they disliked or found annoying about it.

Figure 30



Qx: When driving this (car/truck/van) how often do you wear your (shoulder/lap) belt?

Qx: Is there anything that you particularly dislike or find annoying about wearing your seat belt?

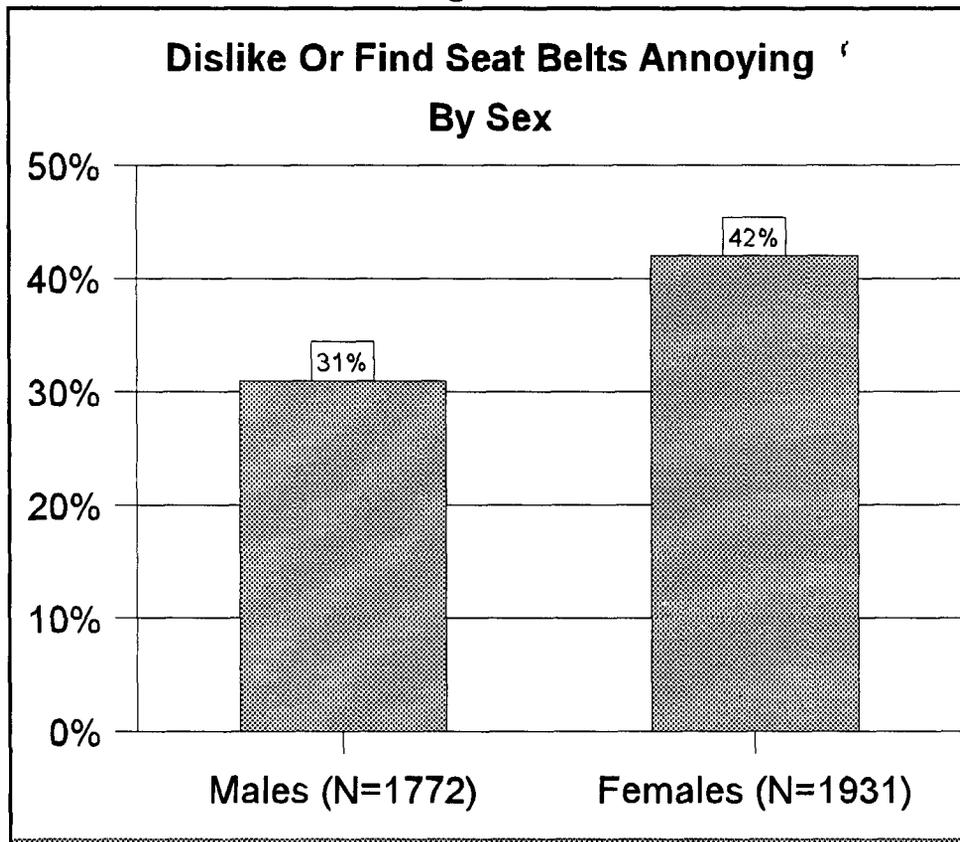
Base: Drives a motor vehicle that has seat belts.

Unweighted N's listed above

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Although the previous chapter showed females more likely than males to wear seat belts, they also were more likely to complain about the devices. More than four out of ten females (42%) said there was something they particularly disliked or found annoying about wearing their seat belt compared to fewer than one-third (31%) of males.

Figure 31



Qx: Is there anything that you particularly dislike or find annoying about wearing your seat belt?

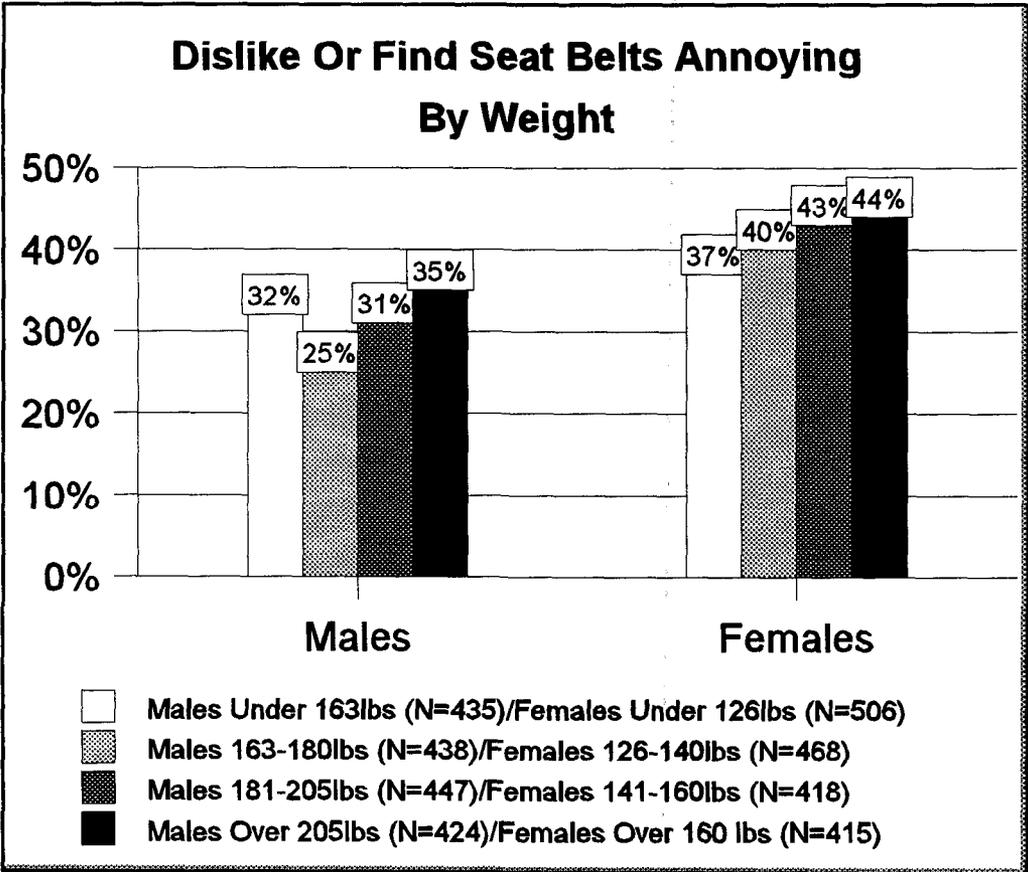
Base: Drives a motor vehicle that has seat belts.

Unweighted N's listed above

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

The previous chapter also suggested that being overweight could deter seat belt use, presumably through discomfort. However, the pattern was less clear with respect to professed annoyance with seat belts. Although the highest percentage of respondents expressing discontent occurred in the heaviest weight group for both males (35%) and females (44%), most of the remaining weight groups were close enough for the differences to be statistically insignificant.

Figure 32

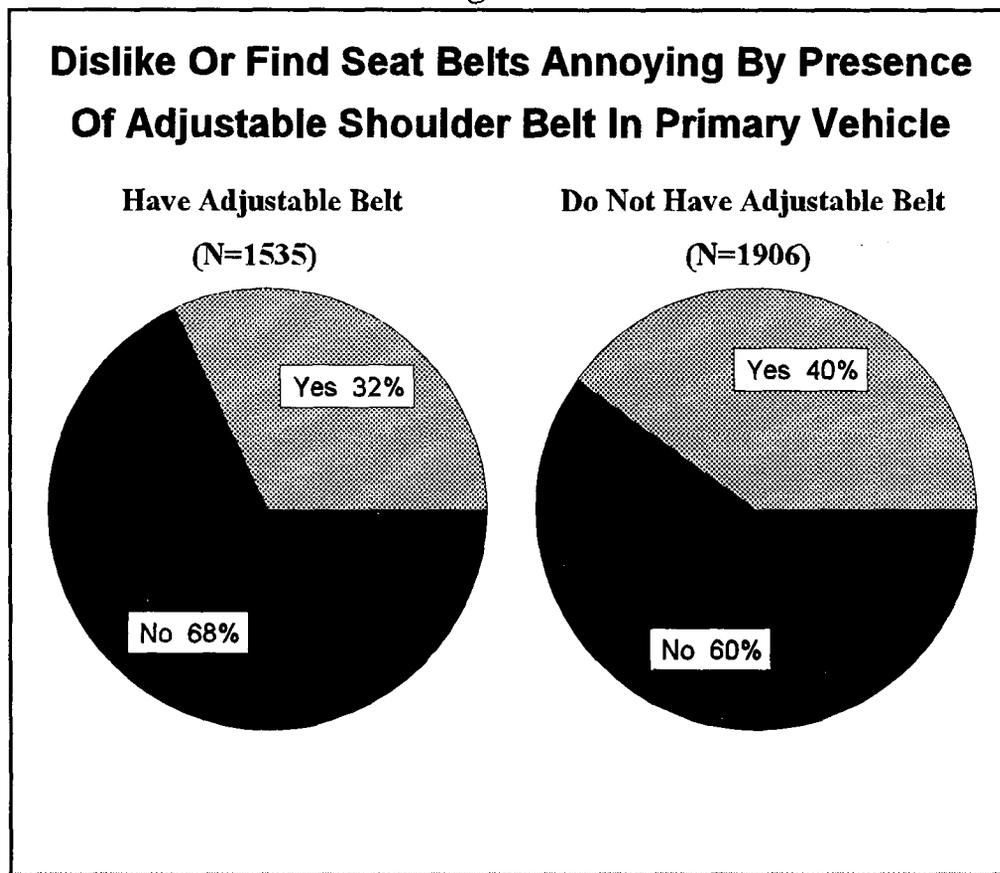


Qx: What is your weight?
Qx: Is there anything that you particularly dislike or find annoying about wearing your seat belt?
Base: Drives a motor vehicle that has seat belts.
Unweighted N's listed above

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

If drivers reported that the shoulder belt in their primary vehicle was adjustable, then they were less likely to express annoyance about seat belts. Whereas 32% of respondents with adjustable shoulder belts in their primary vehicle said there was something they particularly disliked or found annoying about wearing their seat belt, 40% without adjustable shoulder belts did the same. When only the drivers who said they had actually used the adjustable feature of their shoulder belts are considered, 33% expressed annoyance with seat belts.

Figure 33



Qx: Shoulder belts are usually attached to the door or frame behind the driver's left shoulder. In some vehicles, this attachment can be moved up or down to adjust the shoulder belt. Is this attachment adjustable in your vehicle?

Qx: Is there anything that you particularly dislike or find annoying about wearing your seat belt?

Base: Drives a motor vehicle that has seat belts across both the lap and shoulder or across the shoulder only.

Unweighted N's listed above.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

If respondents said there was something they particularly disliked or found annoying about seat belts, they were asked to specify what bothered them. The most common complaint involved pressure or pain on various parts of the body (53%). Females (62%) especially experienced this type of discomfort, particularly being choked by the seat belt (47%).

TABLE 30
What Drivers Dislike Or Find Annoying About Seat Belts

Qx: Is there anything that you particularly dislike or find annoying about wearing your seat belt?

Qx: What is it that you dislike or find annoying? Anything else?

Base: Drivers who dislike or find something annoying about seat belts.

| Dislikes/Annoyances | Total (N=1357) | Males (N=566) | Females (N=791) |
|--|-------------------|------------------|--------------------|
| Discomfort: Body Pressure/Pain | 53% | 40% | 62% |
| Pressure on my neck/chokes me/ cuts across my neck | 37% | 24% | 47% |
| Pressure on my shoulder/shoulder strap too tight | 15% | 14% | 15% |
| Pressure on my chest/strap doesn't fit my chest | 3% | 2% | 4% |
| Pressure on my stomach/lap belt is too tight | 2% | 3% | 2% |
| Painful for body ailments | 1% | * | 1% |
| Belt Too Tight | 4% | 5% | 3% |
| Discomfort: Body Irritation | 10% | 8% | 11% |
| Irritates/chafes my skin/rash | 9% | 8% | 11% |
| Makes me perspire/perspire when it's hot outside | * | * | - |
| Seat belt should be padded/material is too harsh | * | * | * |
| Discomfort: Other | 13% | 15% | 11% |
| Uncomfortable (unspecified) | 11% | 14% | 9% |
| Uncomfortable during pregnancy | 1% | - | 1% |
| Claustrophobia/claustrophobic | 1% | 1% | * |
| Any other discomfort mentions | * | * | 1% |

* Less than 0.5% – Zero cases Numbers do not add to 100% due to multiple response.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

TABLE 30 (CONTINUED)
What Drivers Dislike Or Find Annoying About Seat Belts

| Dislikes/Annoyances | Total (N=1357) | Males (N=566) | Females (N=791) |
|--|-------------------|------------------|--------------------|
| Confining | 15% | 21% | 10% |
| Feel restricted/too confining/constricting | 10% | 15% | 6% |
| Hard to turn around/look behind me when backing up | 2% | 3% | 2% |
| Hard to lean forward | 2% | 3% | 1% |
| In case of crash/emergency/it's hard to get out of car | 2% | 2% | 1% |
| Any other movement restrictions mentions | 1% | 1% | 1% |
| Other | | | |
| Wrinkles my clothes | 8% | 5% | 10% |
| Need to adjust seat belt for my size | 7% | 5% | 9% |
| Seat belt is loose fitting | * | * | 1% |
| Seat belts are a nuisance/hassle/annoyance | 4% | 6% | 3% |
| Invasion of privacy/taking away constitutional rights | 4% | 7% | 1% |
| Takes too much time to fasten seat belt | 2% | 3% | 2% |
| Manual buckling/release it manually | 3% | 4% | 2% |
| Any other seat belt adjustment mentions | 1% | * | 1% |
| Seat belt gets stuck (unspecified) | 2% | 3% | 2% |
| Seat belt gets stuck in door | * | * | * |
| Any other seat belt malfunction mentions | 1% | 1% | * |
| Automatic seat belt gets in the way | 1% | 1% | 1% |
| Don't like automatic seat belts | 1% | 2% | 1% |
| Any other miscellaneous mentions | 1% | 2% | 1% |
| Don't know/no answer | 2% | 2% | 2% |

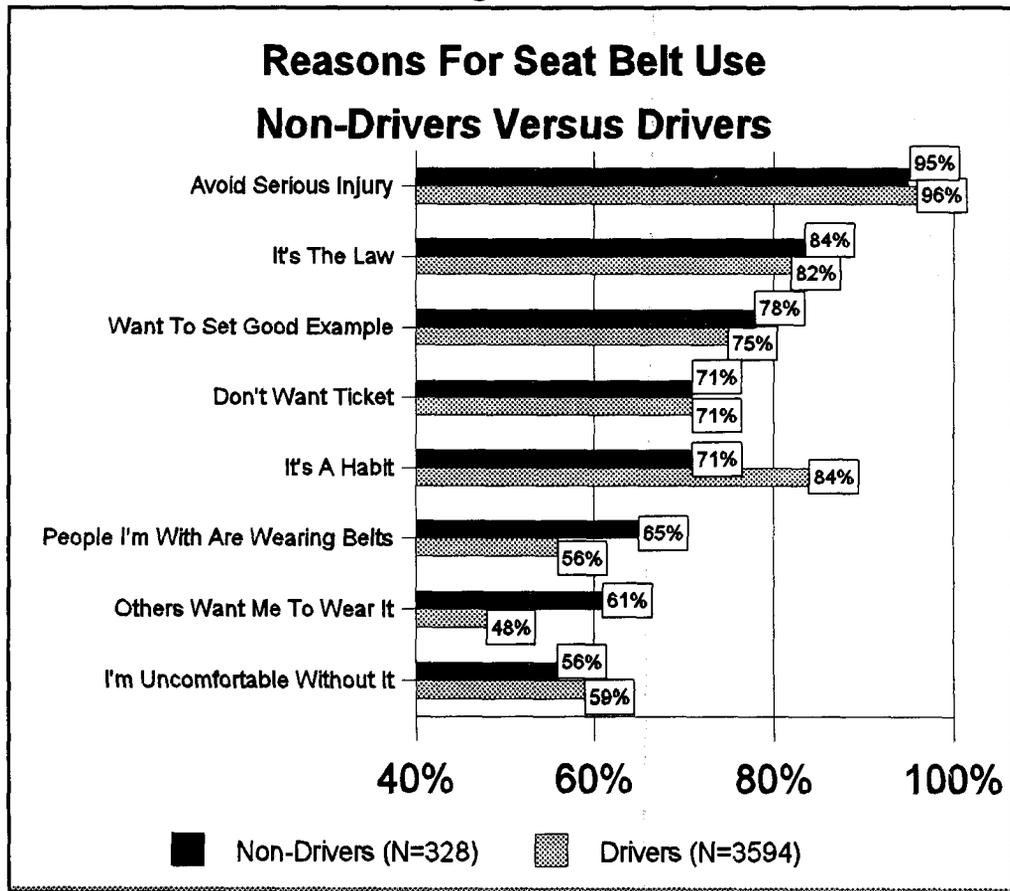
* Less than 0.5%

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Reasons For Seat Belt Use By Non-Drivers

Interviewers asked non-drivers their reasons for seat belt use while riding as passengers in motor vehicles. The approach was the same as that used with drivers: eight different reasons were read, one at a time, and non-drivers were asked whether or not each reason was a factor in their use of seat belts. They were then given an opportunity to volunteer other reasons for their seat belt use. Non-drivers and drivers were similar on most items, the exceptions being a greater tendency among non-drivers to refer to social pressures (people they were with; others wanted them to wear seat belts) while drivers more often referred to habit.

Figure 34

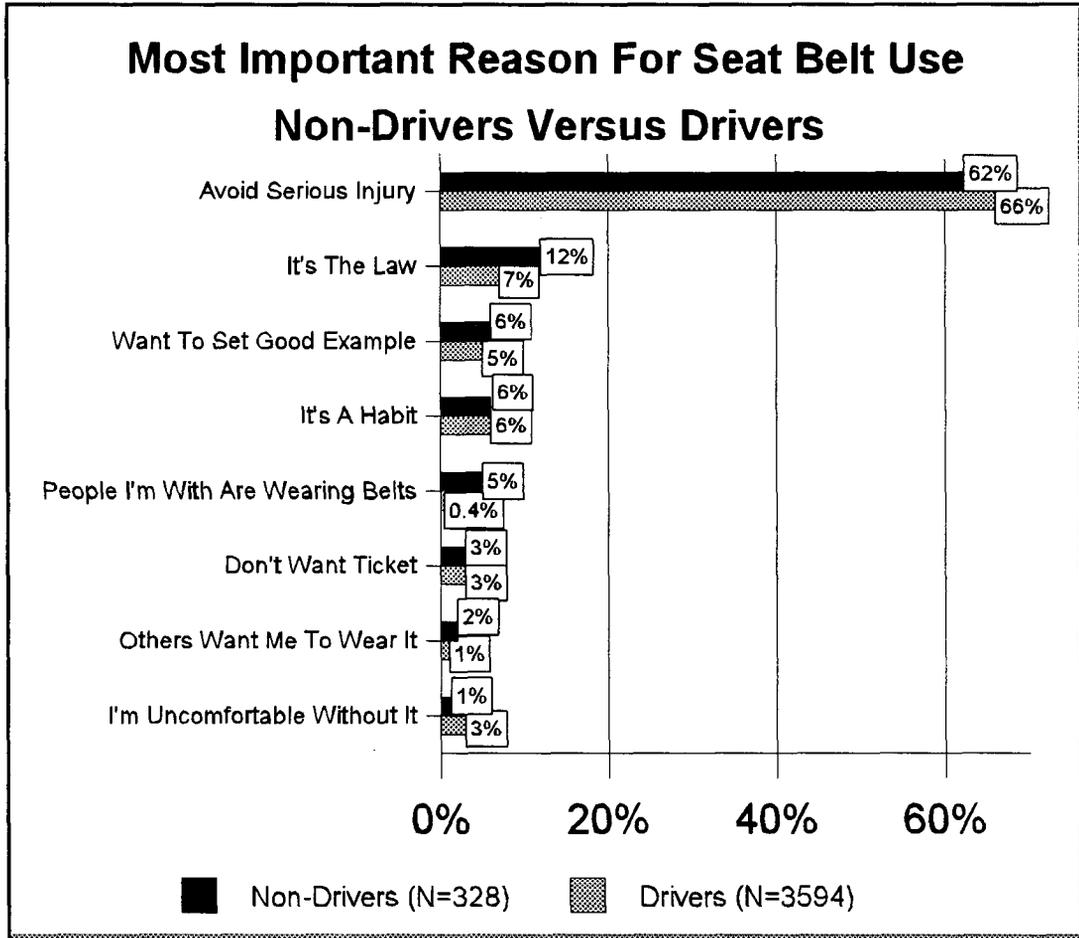


Qx: When I wear my seat belt, I do so because. . . .
Base: Drivers and non-drivers who at least on occasion wear their seat belts.
Unweighted N's listed above

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

By far the most important reason for seat belt use by non-drivers (62%), as with drivers (66%), was to avoid serious injury. The “law” ranked a distant second for both groups.

Figure 35



Qx: Of the following reasons you just gave me for wearing your seat belt, which is the most important?

Base: Drivers and non-drivers who at least on occasion wear their seat belts.

Unweighted N's listed above.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Non-Drivers' Reasons For Not Using Seat Belts

Non-drivers who at least sometimes did not wear a seat belt while riding were asked their reasons for non-use.⁵ As with drivers, interviewers read eight potential reasons to respondents. For each one, non-drivers were asked to agree or disagree that they sometimes did not wear their belt for that reason. They were then given an opportunity to volunteer other reasons why they did not use their seat belts. Readers are cautioned that the number of non-drivers (N=173) was relatively small in these analyses.

The most commonly cited reason was that they forgot to wear their seat belt (48%). Other frequently cited reasons were that they were only riding a short distance (41%), the seat belt was uncomfortable (38%), and they were in a rush (33%). About one-in-five persons attributed at least some of their non-use to their companions not wearing seat belts (22%), riding in light traffic (21%), or the probability of a crash being too low (18%).

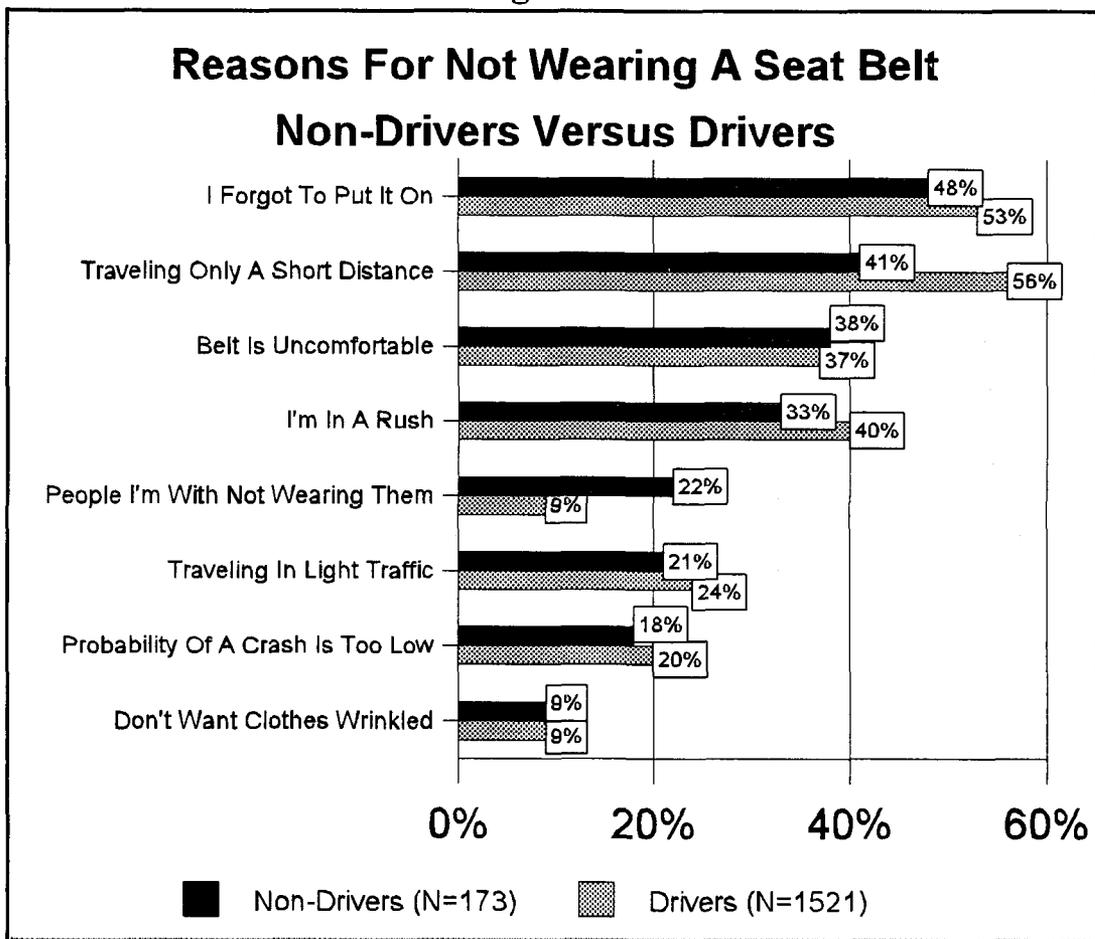
Forgetting also ranked first as the most important reason for non-use of seat belts among non-drivers; approximately one-in-five (24%) gave it as the chief cause. Discomfort (17%), riding only a short distance (11%), and being in a rush (7%) followed in frequency. However, about one-in-six persons (17%) did not agree that any of the listed reasons applied to them and also did not volunteer any reason.

⁵ Unlike the drivers, non-drivers who never wore seat belts were excluded from the question.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

The largest differences between drivers and non-drivers in the reasons given for not wearing seat belts occurred in the “short distance” and “people I’m with” response categories. Drivers were more likely to attribute non-use to traveling only a short distance (56% to 41%). Conversely, non-drivers (22%) were more likely than drivers (9%) to say they did not wear seat belts because the people they were with were not wearing them. Thus once again non-drivers appeared more affected by social pressures (see page 76).

Figure 36



Qx: Sometimes I do not wear my seat belt because.

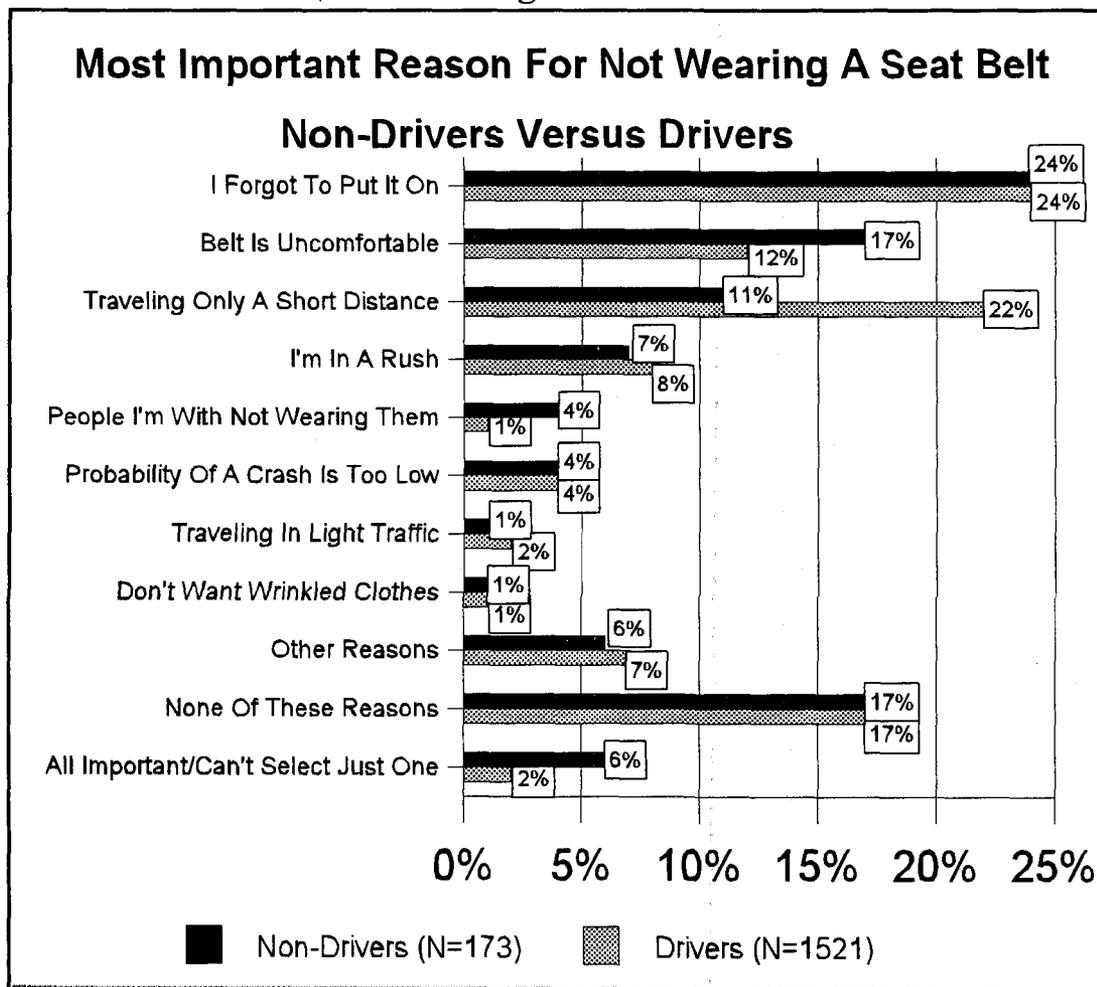
Base: Drivers and non-drivers who at least on occasion do not wear their seat belts.

Unweighted N's listed above.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Drivers were about twice as likely as non-drivers to answer that the most important reason they did not wear their seat belt was because they were only going a short distance (22% versus 11%). There was little difference between the two groups on other items.

Figure 37



Qx: Of the following reasons you just gave me for not wearing your seat belt, which is the most important?

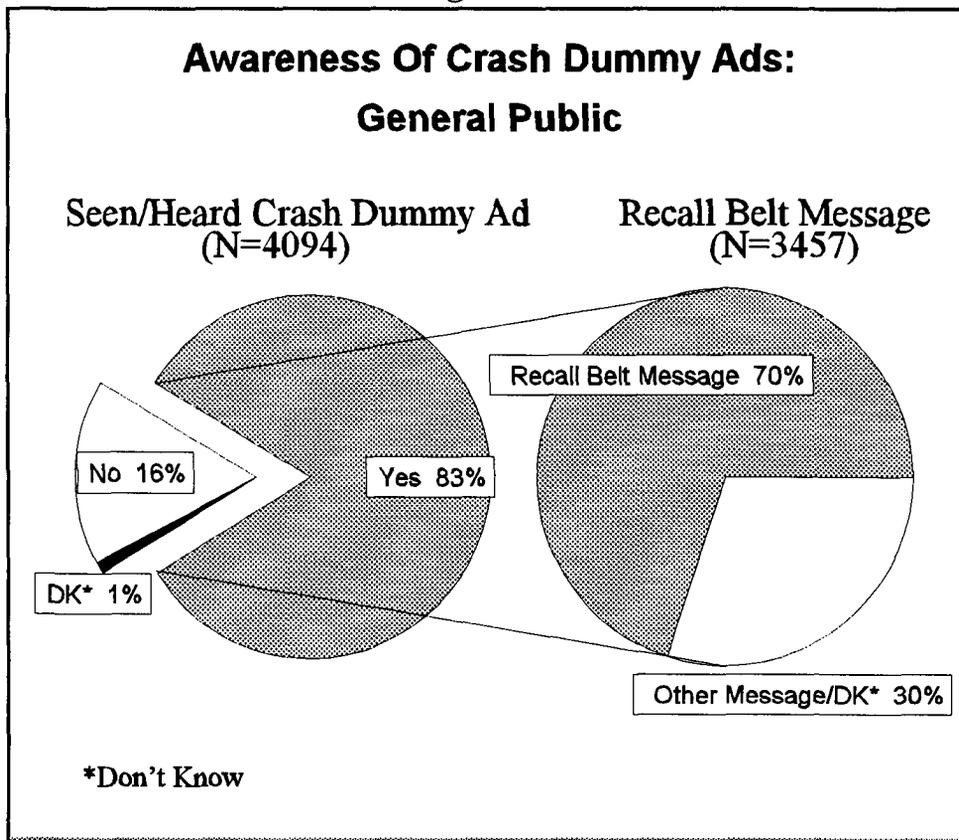
Base: Drivers and non-drivers who at least on occasion do not wear their seat belts. Unweighted N's listed above.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Vince and Larry, The Crash Dummies

The critical need to communicate to the public the importance of seat belt use prompted the U.S. Department of Transportation (DOT) to expend substantial resources to develop public service announcements and conduct other safety marketing activities to convey the message to “buckle up.” Advertisements about seat belt use in which Vince and Larry, the crash dummies, were the central characters have been an important part of DOT’s effort. This survey found widespread public exposure to the crash dummy ads. More than eight-in-ten persons (83%) recalled seeing or hearing ads that used crash dummies. Among those who had seen the ads, 70% recalled that the message was to wear seat belts. This translated into 58% of the population age 16 and older who remembered the crash dummy ads and also recalled that the ads promoted seat belt use.

Figure 38



Qx: Have you seen or heard any advertisements that used crash dummies?

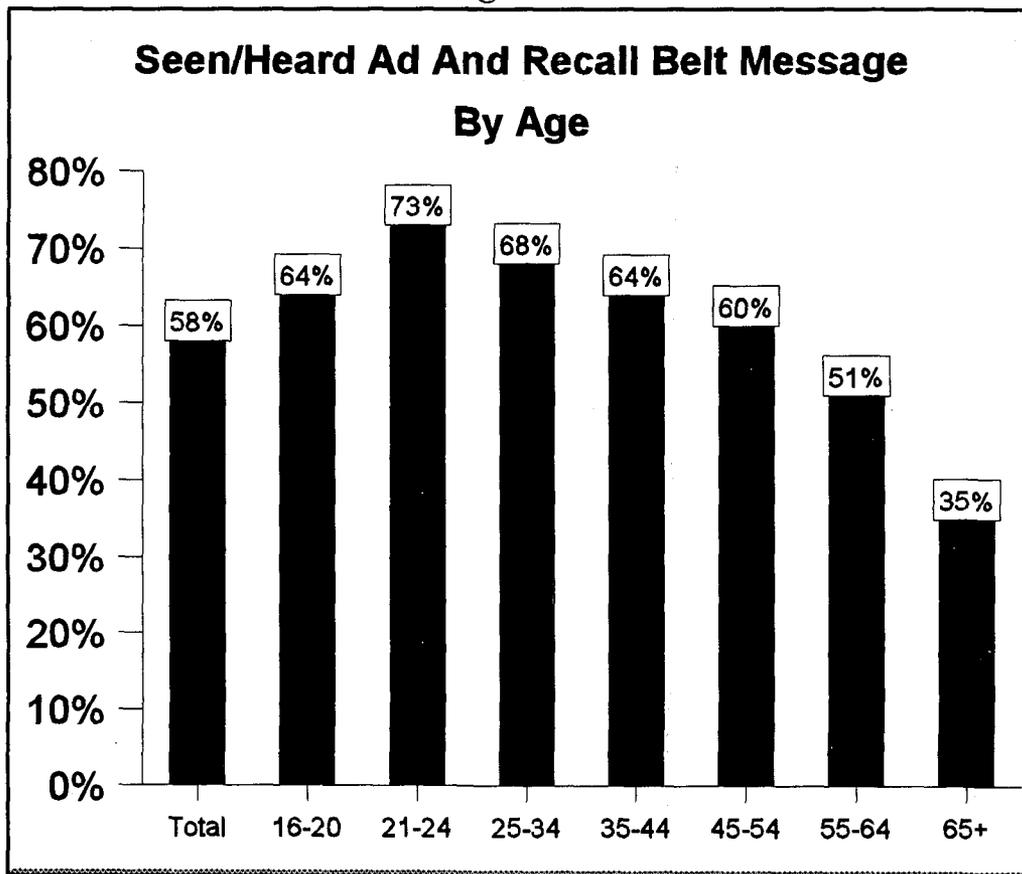
Qx: Could you tell me what advice or message the crash dummies advertised?

Base: Total population age 16+

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

The crash dummy advertisements appeared to be most successful in reaching younger target audiences. Recall of both the ads and their seat belt message was highest among the 21-to-24-year-olds (73%), and declined with each subsequent age group.

Figure 39



Qx: Have you seen or heard any advertisements that used crash dummies?

Qx: Could you tell me what advice or message the crash dummies advertised?

Unweighted N's: Total (N=4094), 16-20 (N=398), 21-24 (N=302), 25-34 (N=1066), 35-44 (N=931), 45-54 (N=542), 55-64 (N=330), 65+ (N=479)

1998 SURVEY RESULTS

CHAPTER 3

**ATTITUDES CONCERNING THE UTILITY OF SEAT
BELTS, RISK PERCEPTION, AND FATALISM**

Introduction Of New Survey Section On Attitudes Concerning Seat Belts

In 1998, the Motor Vehicle Occupant Safety Survey introduced a new section on attitudes and perceptions related to seat belt use. The section consisted of a series of ten statements that interviewers read to the respondents. After reading each statement, the interviewers asked the respondents if they strongly agreed, somewhat agreed, somewhat disagreed, or strongly disagreed.

The section served several purposes: to assess current messaging strategies; to corroborate and quantify with a large sample earlier focus group findings concerning impediments to seat belt use; and to provide other strategic information for addressing reasons for non-use. Thus the content for this section derived from previous research as well as current program activity.

This chapter summarizes results from those items that explored the perceived utility of seat belts, and perceptions of risk related to seat belt use. Attitude items that involved perceptions of enforcement of seat belt laws are addressed in the next chapter (Chapter 4).

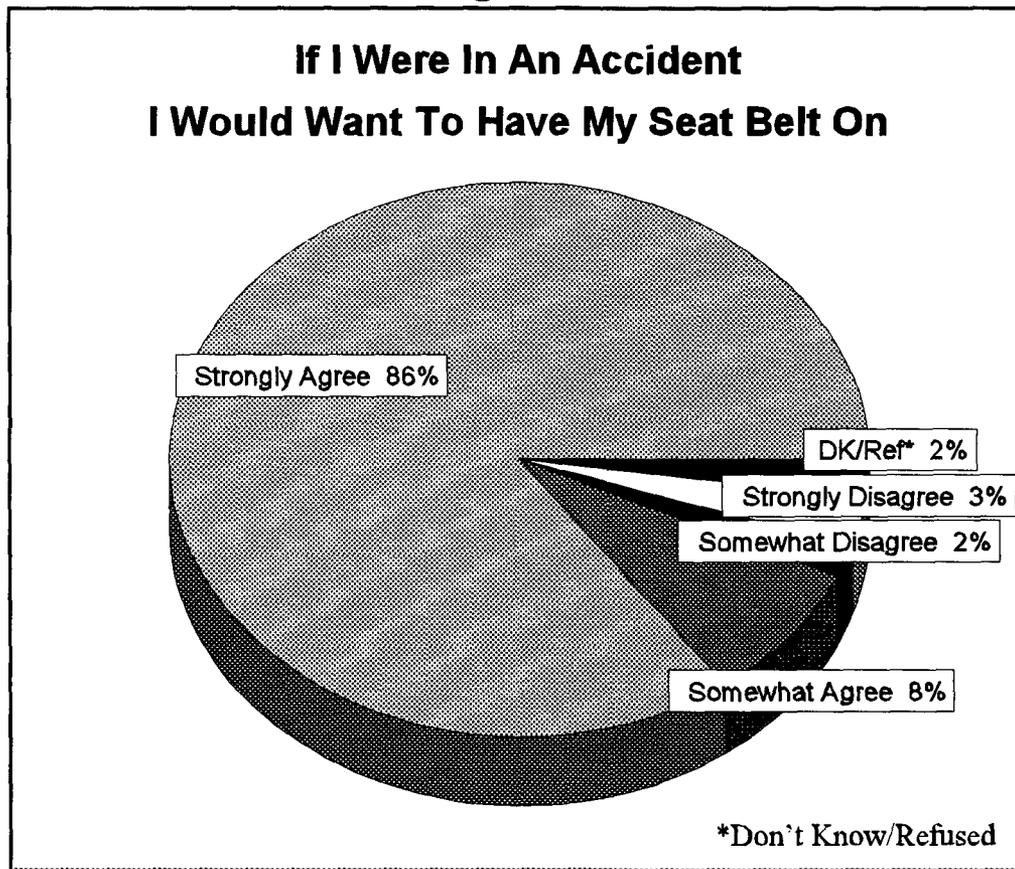
Since its inception in 1994, this survey has asked two questions about fatalism the belief that all events are determined by fate and are therefore inevitable. They are included here because of their similarity to the other themes presented in this chapter. Lastly, there is a summary of responses to a question about whether a seat belt has ever broken apart when the respondent, or someone s/he knows, was using it.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Attitudes Concerning Risk Perception And The Utility Of Seat Belts

The most basic question concerning the perceived usefulness of seat belts is whether the public believes they improve the chances of avoiding death or injury in a crash. The survey asked respondents their level of agreement or disagreement with the statement "If I were in an accident, I would want to have my seat belt on." More than eight-out-of-ten persons (86%) strongly agreed with the statement. Another 8% somewhat agreed, bringing the total level of agreement to 93% (85.5% + 7.6%).

Figure 40



Qx: Now I'm going to read you a few statements. Please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree. If I were in an accident, I would want to have my seat belt on.

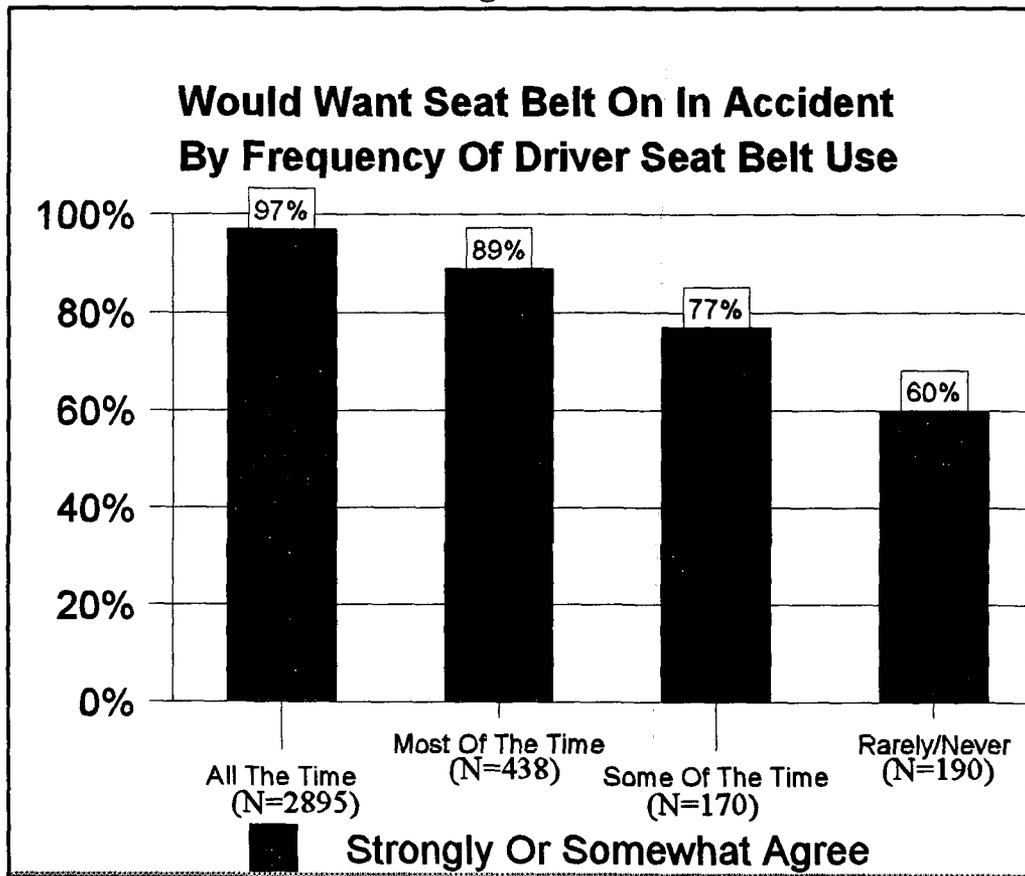
Base: Total population age 16+

Unweighted N=4094

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Drivers who regularly wore their seat belts were most likely to strongly or somewhat agree with the statement that they would want to have their seat belt on if they were in an accident. Yet even among drivers who said they never or only rarely wore their seat belts, more than half (60%) either somewhat or strongly agreed with the statement.

Figure 41



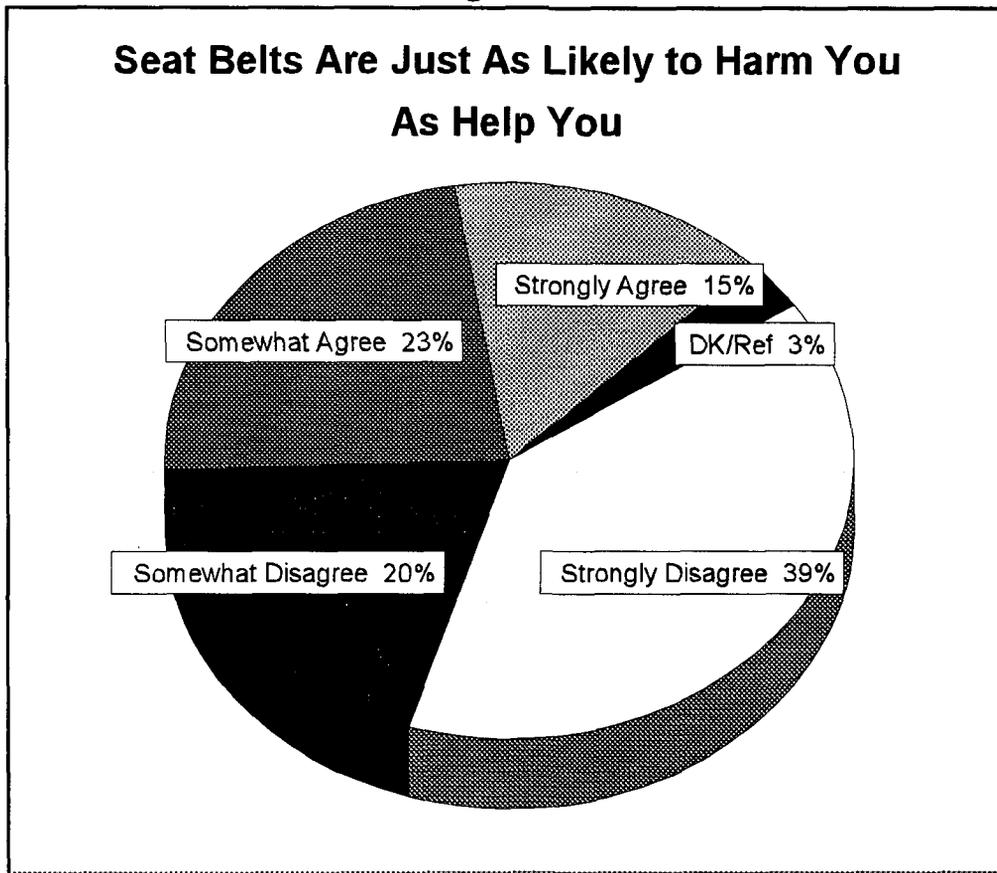
Qx: When driving this [car/truck/van] how often do you wear your {shoulder/lap} belt?
Qx: Now I'm going to read you a few statements. Please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree. If I were in an accident, I would want to have my seat belt on.

*Base: Drivers whose primary vehicle has seat belts.
 Unweighted N's listed above.*

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

NHTSA has conducted a number of focus groups with target populations characterized by low seat belt use. One of the more common sentiments expressed in these groups was that “seat belts are just as likely to harm you as help you.” According to the national data obtained in this survey, more than one-third (38%) of the general public agreed with this statement, with 15% strongly agreeing.

Figure 42



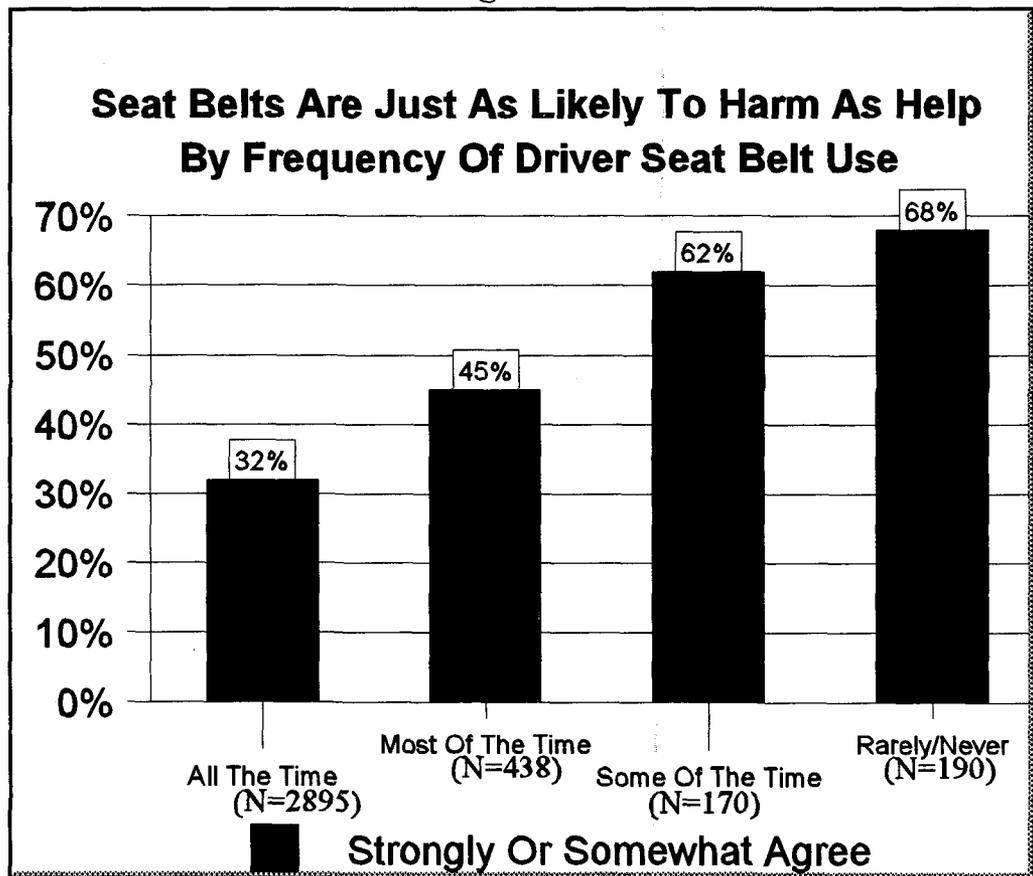
Qx: Now I'm going to read you a few statements. Please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree. Seat belts are just as likely to harm you as help you.

*Base: Total population age 16+
Unweighted N=4094*

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Even among drivers who reported wearing their seat belt “all of the time” while driving, almost one-third (32%) either somewhat or strongly agreed with the statement that “seat belts are just as likely to harm you as help you.” For infrequent seat belt users, more than 60% held this opinion. Readers are reminded that one of the specific reasons given by non-users for not wearing seat belts were questions about their safety (page 65).

Figure 43

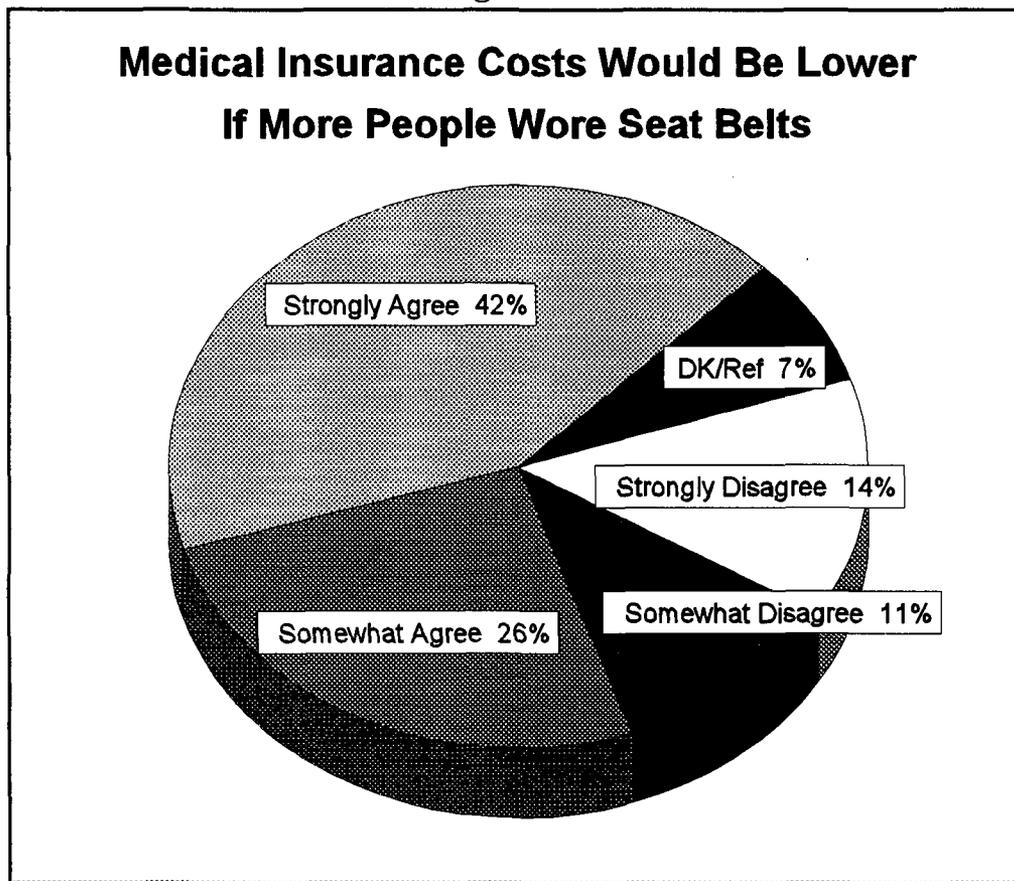


Qx: When driving this [car/truck/van] how often do you wear your {shoulder/lap} belt?
Qx: Now I'm going to read you a few statements. Please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree. Seat belts are just as likely to harm you as help you.
Base: Drivers whose primary vehicle has seat belts.
Unweighted N's listed above.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

One of the messages that safety professionals have been communicating to the public is that non-use of seat belts translates into increased costs for everyone, as the greater number of fatalities and injuries resulting from non-use extracts more resources from society. This survey sought to determine if the public made the connection that non-use of seat belts results in more fatalities and injuries, and that some of the costs for those increased fatalities and injuries are passed on to them. The survey found that two-thirds (68%) of the public either strongly or somewhat agreed that medical insurance costs would be lower if more people wore their seat belts.

Figure 44



Qx: Now I'm going to read you a few statements. Please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree. Medical insurance costs would be lower if more people wore seat belts.

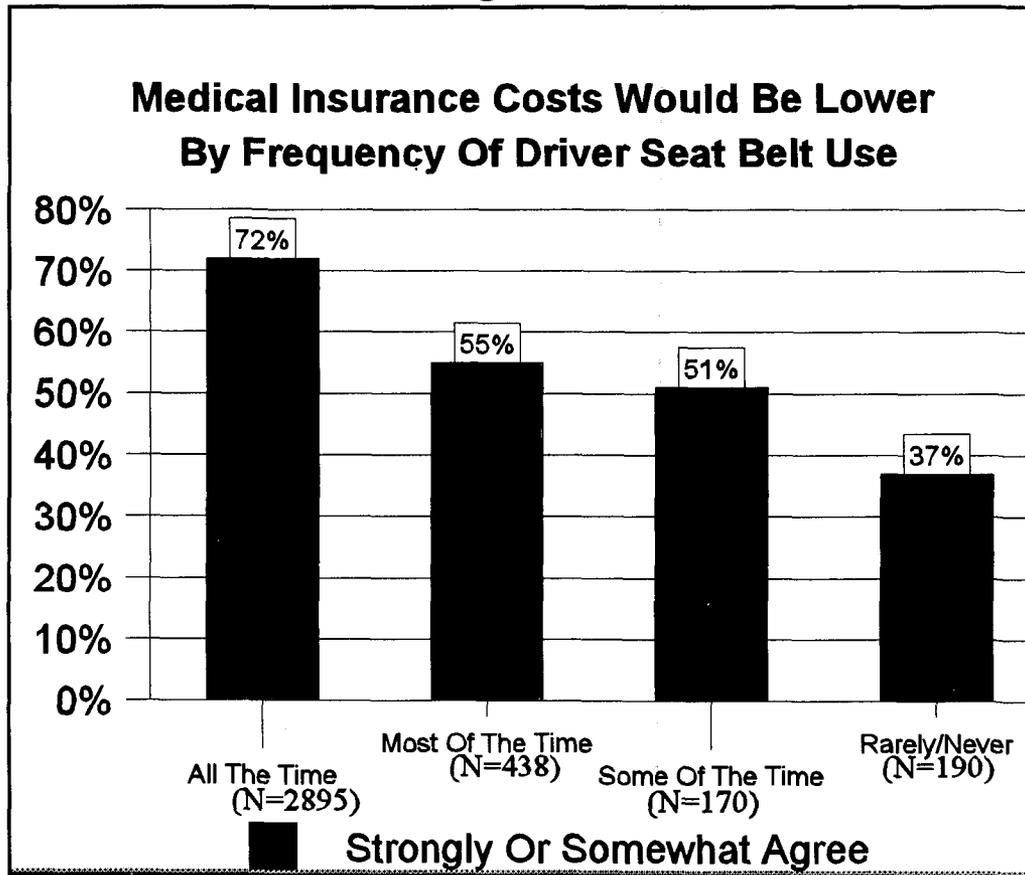
Base: Total population age 16+

Unweighted N=4094

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Almost three-quarters (72%) of drivers who reported wearing seat belts “all the time” agreed that medical insurance costs would be lower with increased seat belt use. More than one-half of “most of the time” and “some of the time” users concurred.

Figure 45

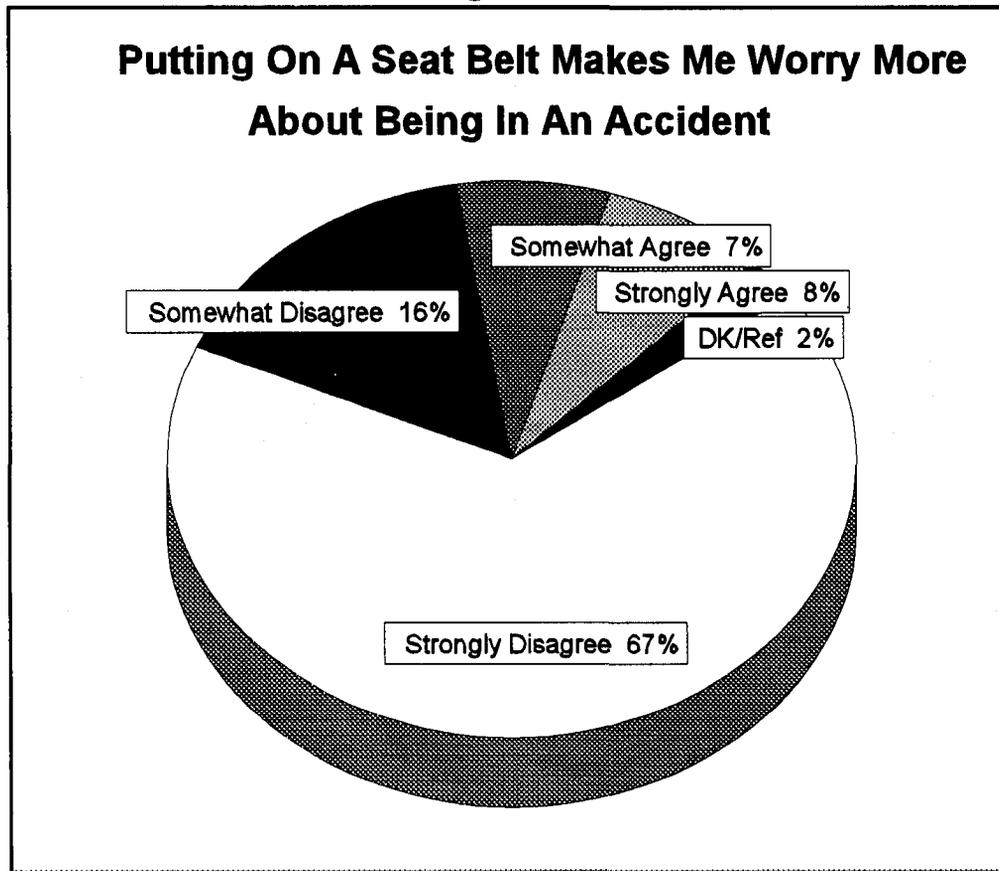


Qx: When driving this [car/truck/van] how often do you wear your {shoulder/lap} belt?
Qx: Now I'm going to read you a few statements. Please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree. Medical insurance costs would be lower if more people wore seat belts.
Base: Drivers whose primary vehicle has seat belts.
Unweighted N's listed above.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Whereas public anxiety over potentially unsafe or unhealthy outcomes may lead to adoption of prescribed safety behaviors, there sometimes is a danger that the intervention itself becomes an anxiety-producing cue that people seek to avoid because of its connection to the negative outcome. This survey explored that issue by getting reaction to the statement "Putting on a seat belt makes me worry more about being in an accident." Most persons refuted the notion, two-thirds (67%) did so strongly. However, 15% of the population indicated some level of agreement with the statement.

Figure 46



Qx: Now I'm going to read you a few statements. Please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree. Putting on a seat belt makes me worry more about being in an accident.

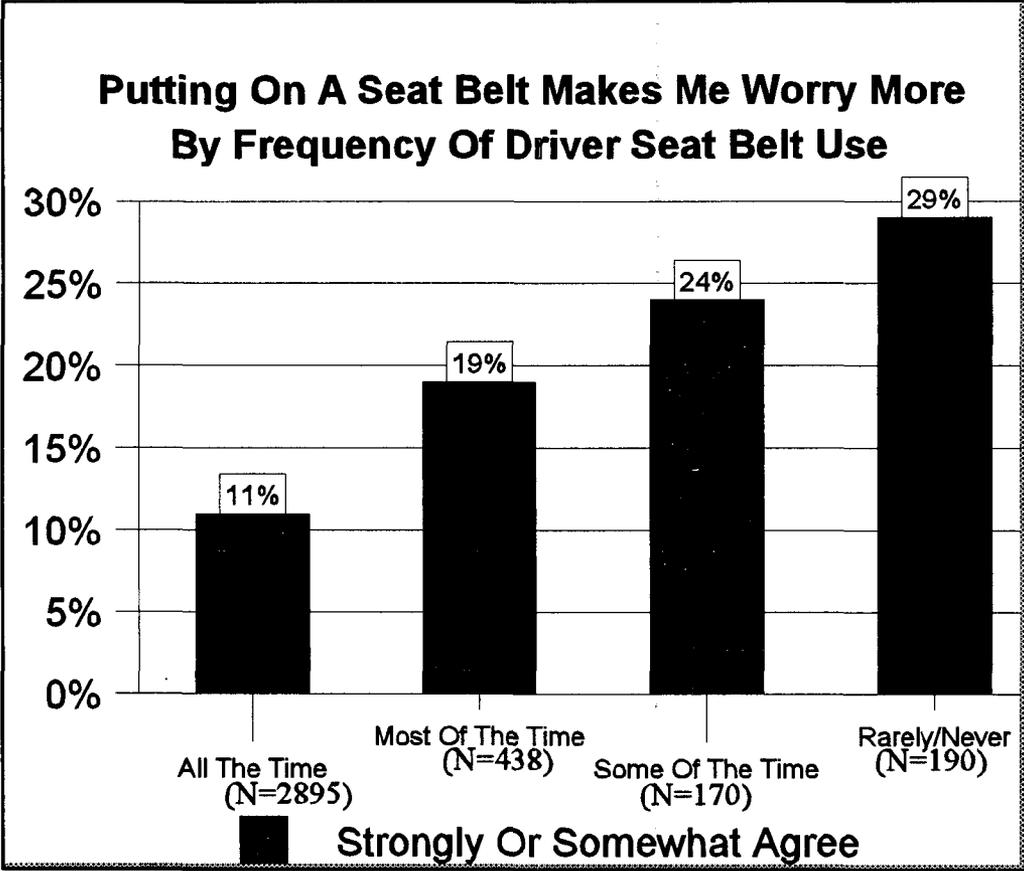
Base: Total population age 16+

Unweighted N=4094

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Reported anxiety from seat belts increased as reported usage decreased, although caution should be exercised in interpreting the numbers for the infrequent users because of the small size of those groups.

Figure 47

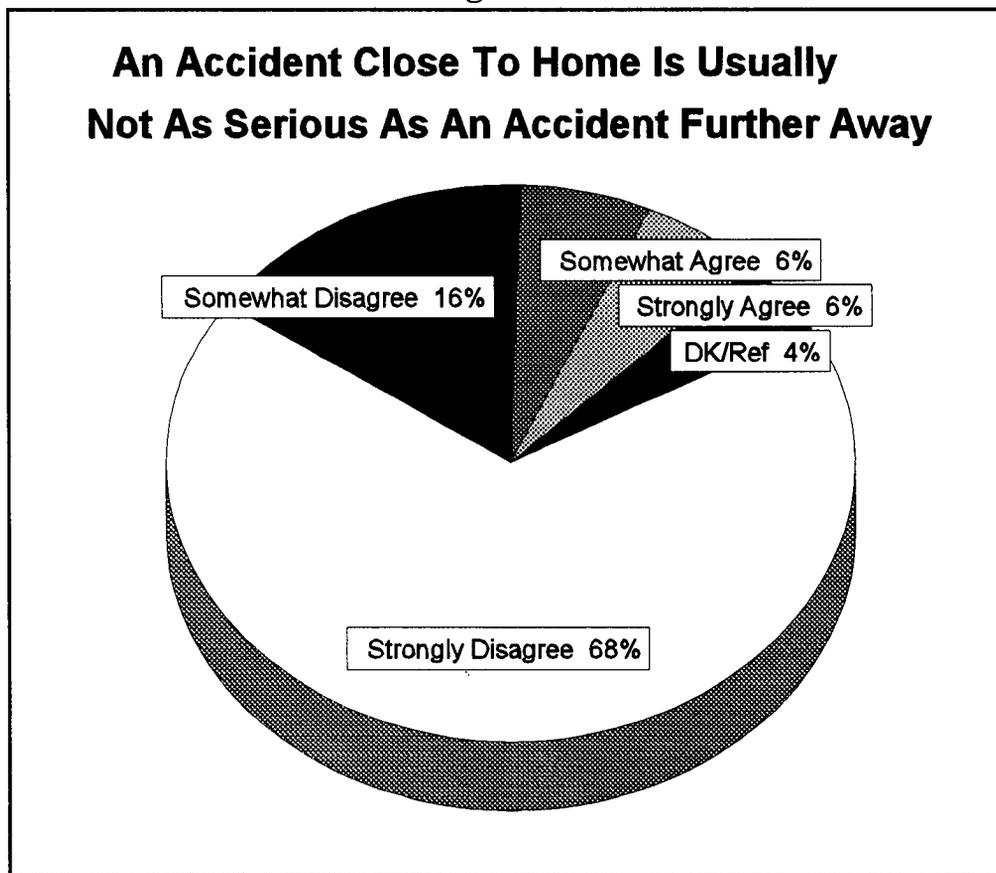


Qx: When driving this [car/truck/van] how often do you wear your {shoulder/lap} belt?
Qx: Now I'm going to read you a few statements. Please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree. Putting on a seat belt makes me worry more about being in an accident.
Base: Drivers whose primary vehicle has seat belts.
Unweighted N's listed above.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Part time seat belt users often gave “driving just a short distance” as a reason for their instances of non-use (see page 59). In addition, some participants in focus groups have commented that they thought crashes close to home would tend to involve “less energy” than those farther away. The survey explored whether this meant that the public was prone to discount the seriousness of potential crashes near where they live. The answer was generally “no” as only one-out-of-eight persons (12%) either somewhat or strongly agreed with the statement that “An accident close to home is usually not as serious as an accident farther away.”

Figure 48



Qx: Now I'm going to read you a few statements. Please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree. An accident close to home is usually not as serious as an accident farther away.

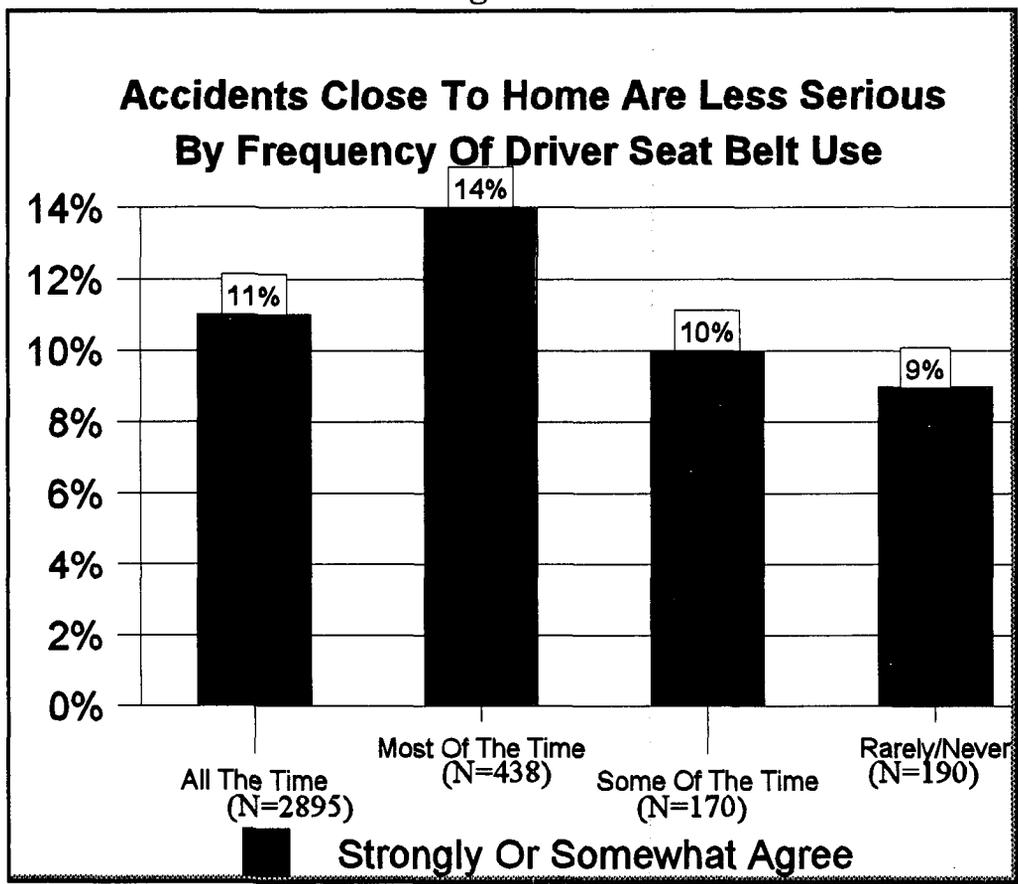
Base: Total population age 16+

Unweighted N=4094

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Unlike the previous attitude items, there was not a correlation between reported belt use and agreement with the statement; only a small percentage of people agreed that crashes close to home were less serious regardless of how often they wore their seat belts. This suggested that the “short distance” reason for non-use derived from an attitude that a crash won’t happen, rather than a belief that the consequences of a nearby crash would be minimal.

Figure 49

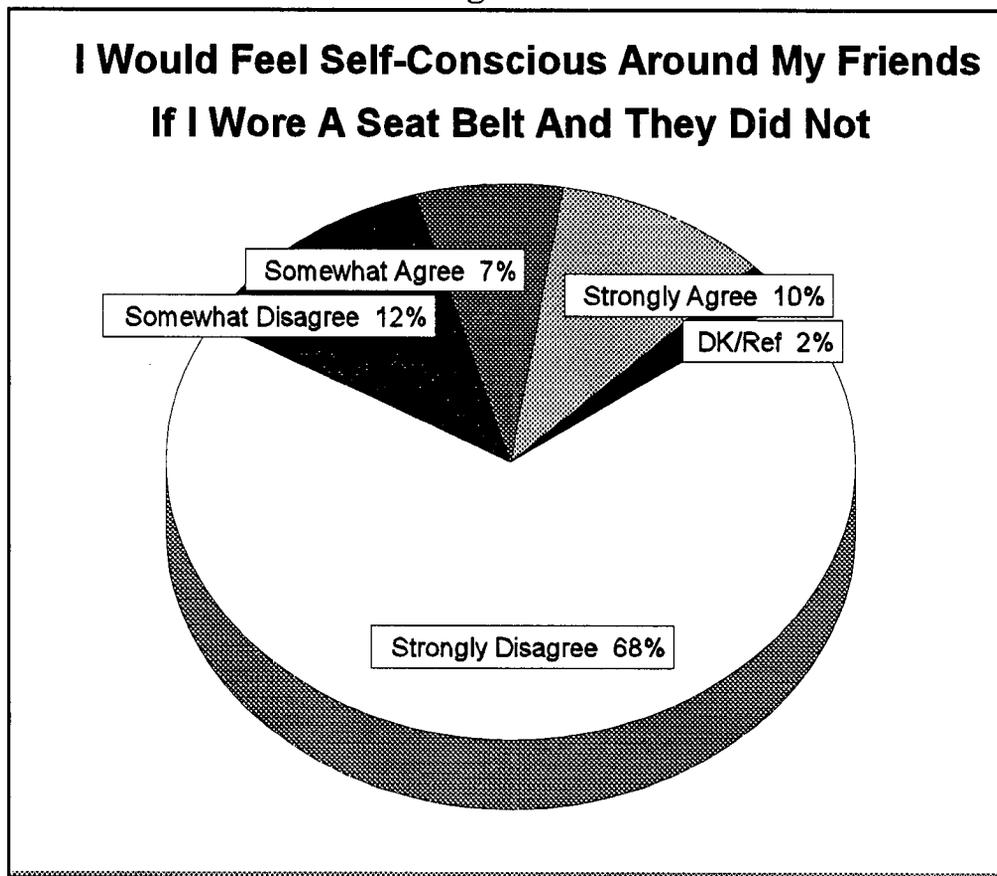


Qx: When driving this [car/truck/van] how often do you wear your {shoulder/lap} belt?
 Qx: Now I'm going to read you a few statements. Please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree. An accident close to home is usually not as serious as an accident farther away.
 Base: Drivers whose primary vehicle has seat belts.
 Unweighted N's listed above.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

To this point, the discussion on perception of risk has revolved around perceived risk of injury. But there may be social risks involved in seat belt use if usage runs counter to the group norm. The survey included an attitude statement addressing this type of situational pressure. Almost one-in-five persons (18%) either strongly or somewhat agreed that they would feel self-conscious around their friends if they wore a seat belt and their friends did not.

Figure 50



Qx: Now I'm going to read you a few statements. Please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree. I would feel self-conscious around my friends if I wore a seat belt and they did not..

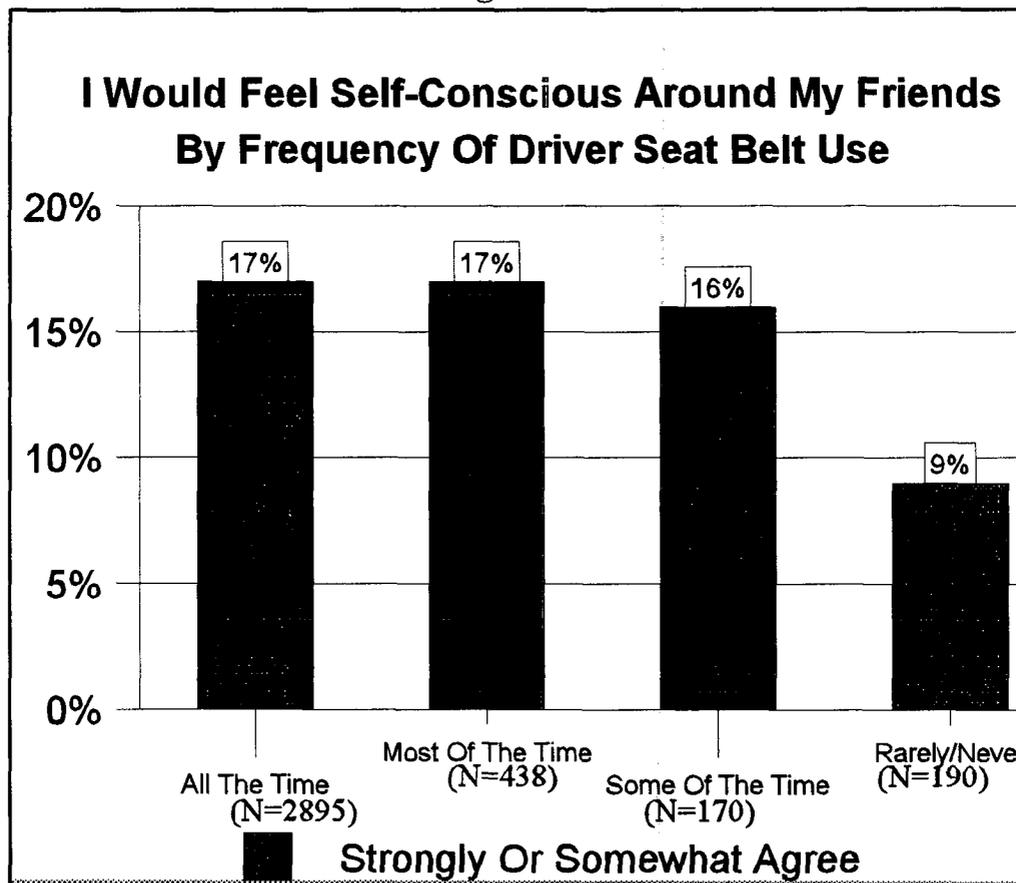
Base: Total population age 16+

Unweighted N=4094

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

The percentage of respondents who acknowledged they would feel self-conscious if they wore their seat belts and their friends did not was virtually the same across levels of reported seat belt use, excepting the non-users who composed a small number of cases. Thus the data did not support an hypothesis that persons who used their seat belts less frequently were more sensitive to this type of social pressure.

Figure 51



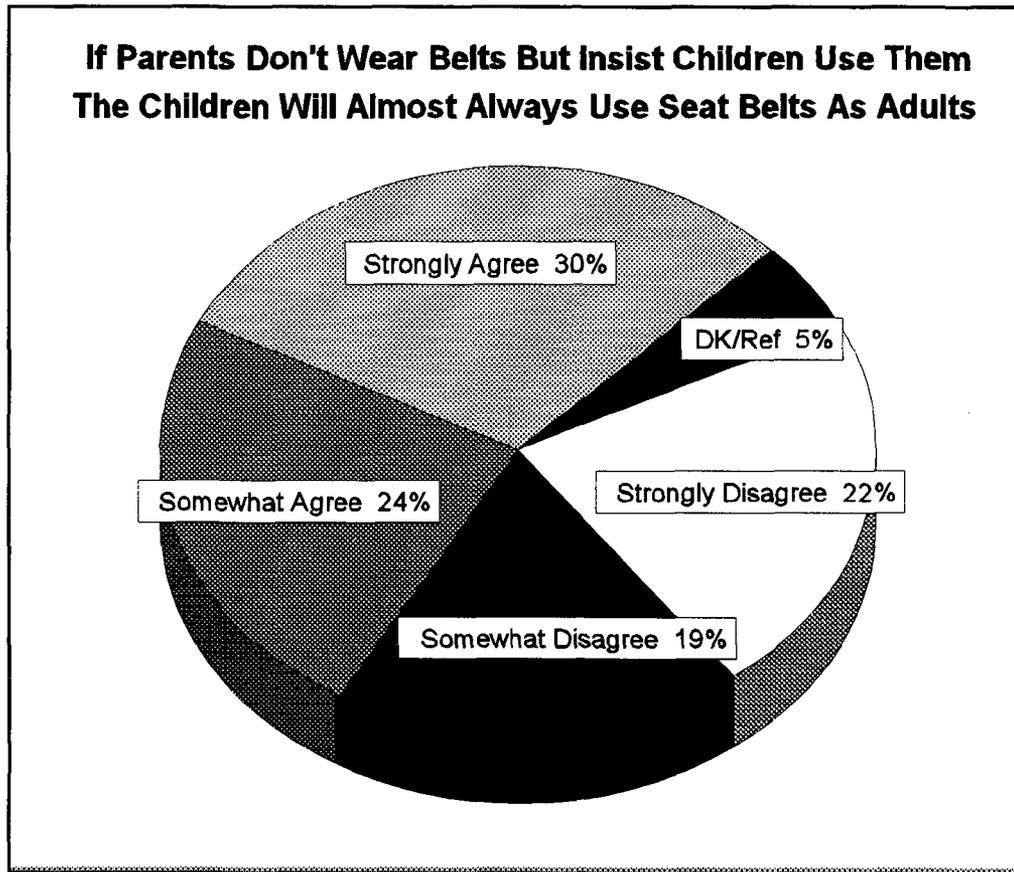
Qx: When driving this [car/truck/van] how often do you wear your {shoulder/lap} belt?
Qx: Now I'm going to read you a few statements. Please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree. I would feel self-conscious around my friends if I wore a seat belt and they did not.
Base: Drivers whose primary vehicle has seat belts.
Unweighted N's listed above.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Attitudes Concerning Parental Influence On Seat Belt Use

Parents who insist that their child use a seat belt, but do not wear the belt themselves, send the child an inconsistent message. The survey examined whether or not the public believed this conflict was inconsequential to establishing a pattern of belt use by the child into adulthood. The attitude statement was complex, and may not have been fully understood by all respondents. Thus the results should be considered exploratory. Still, 54% of the public either strongly or somewhat agreed that “Even if parents don’t wear seat belts but require their children to wear them, then the children will almost always continue to wear seat belts when they’ve grown up.”

Figure 52



Qx: Please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree. Even if parents don't wear seat belts but require their children to wear them, then the children will almost always continue to wear seat belts when they've grown up.

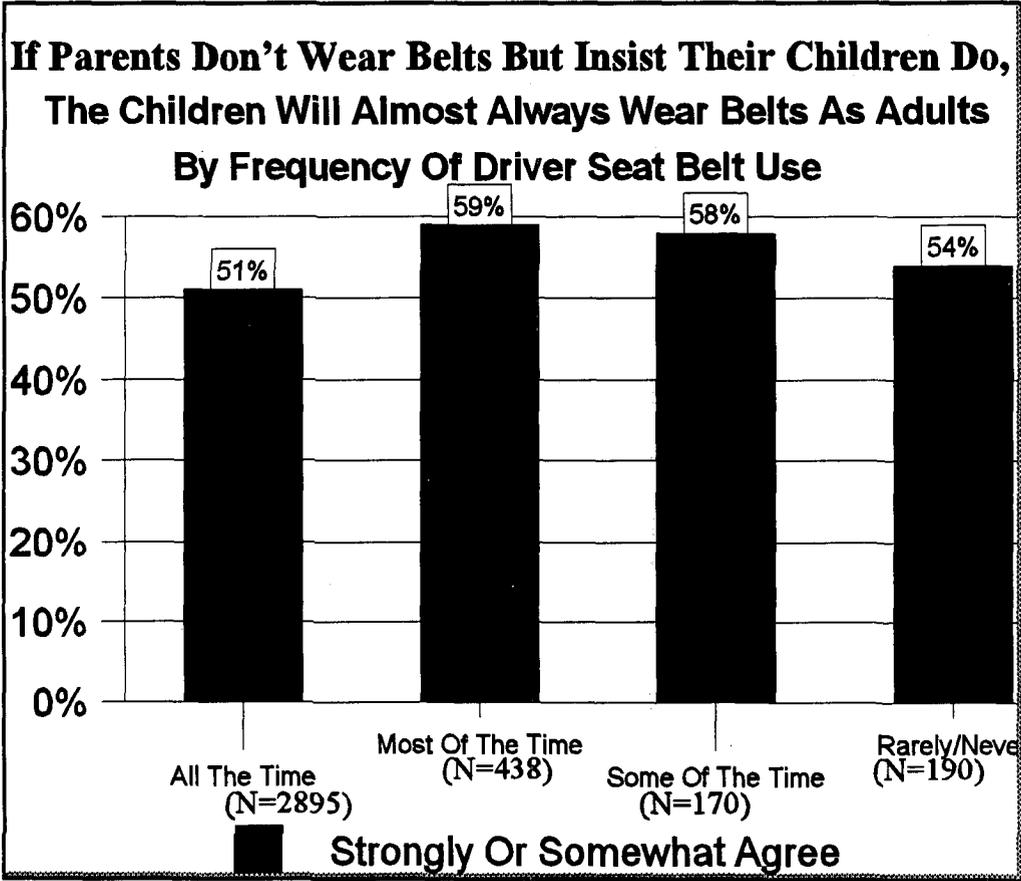
Base: Total population age 16+

Unweighted N=4094

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Drivers who reported wearing their seat belts “all of the time” were least likely to agree that establishing a pattern of seat belt use among children will likely carry over into adulthood despite parental non-use of belts. However, the difference between these full time users and drivers who reported lesser levels of usage was eight percentage points or less.

Figure 53

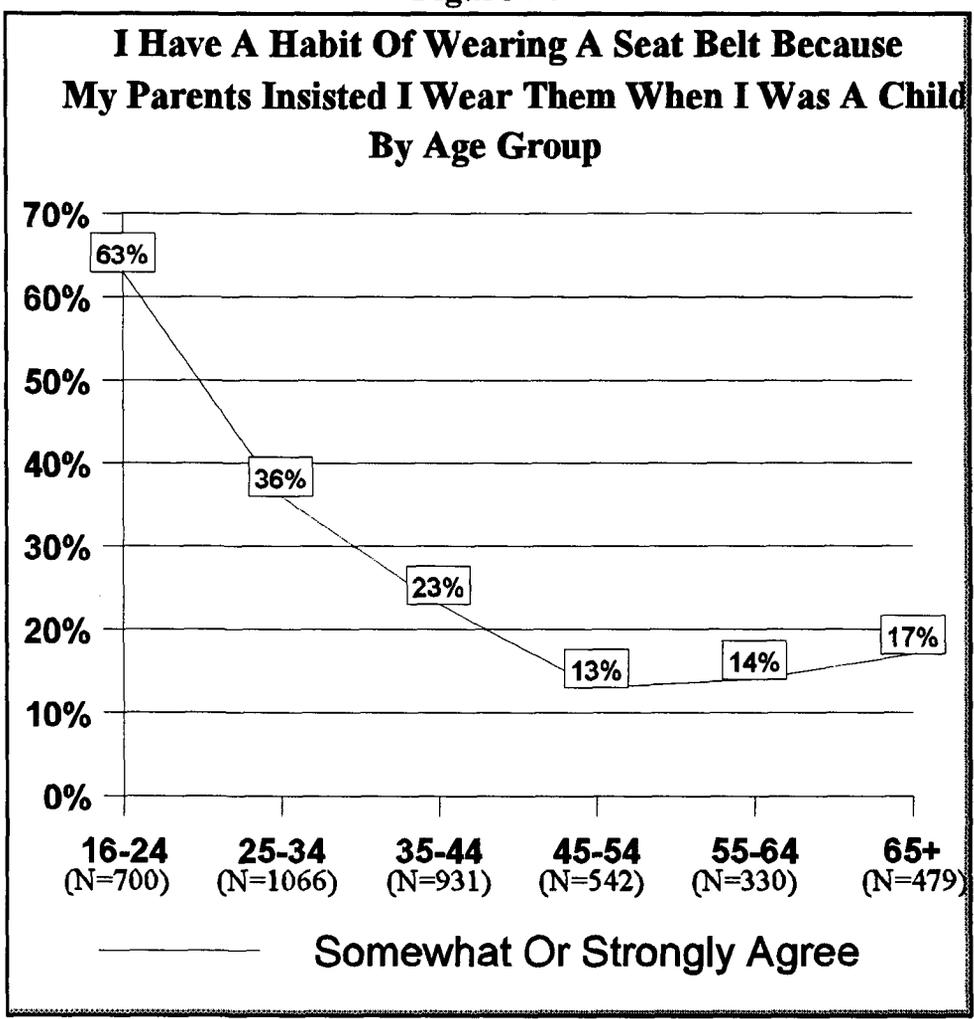


Qx: When driving this [car/truck/van] how often do you wear your {shoulder/lap} belt?
Qx: Now I'm going to read you a few statements. Please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree. Even if parents don't wear seat belts but require their children to wear them, then the children will almost always continue to wear seat belts when they've grown up.
Base: Drivers whose primary vehicle has seat belts.
Unweighted N's listed above.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

The survey further explored the parental influence issue by asking respondents their level of agreement with the statement “I have a habit of wearing a seat belt because my parents insisted I wear them when I was a child.” Among persons 16 to 24, 46% strongly agreed and 17% somewhat agreed. The level of agreement dropped sharply for older age groups, reflecting the lower belt use rates during their childhood years. It’s unclear what the oldest age groups were responding to, as seat belts would not have been in the vehicle fleet during their childhood years.

Figure 54



Qx: Please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree. I have a habit of wearing a seat belt because my parents insisted I wear them when I was a child.

*Base: Total population age 16+
Unweighted N's listed above.*

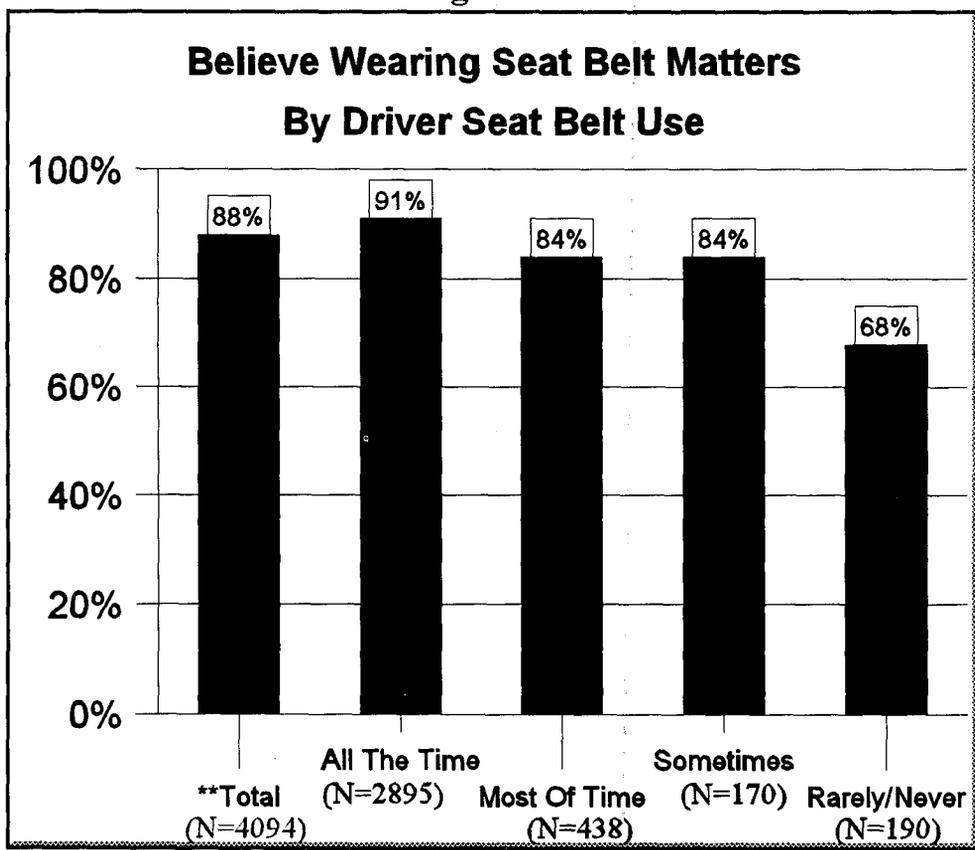
1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Attitudes Toward Fatalism

The survey also explored the role of fatalism in seat belt non-use. Since the primary reason for using seat belts is to avoid injury, there is a question as to whether those who do not wear belts on a regular basis do not recognize the danger, or simply do not believe they can avoid it.

Among the total population age 16 and older, 88% agreed that “people have a choice to do what they can to avoid death and serious injury, so wearing a seat belt does matter.” The percentage was higher among drivers who said they wore their seat belt “all the time” (91%). But even among drivers who rarely or never wore belts, about two-thirds (68%) agreed with the statement.

Figure 55



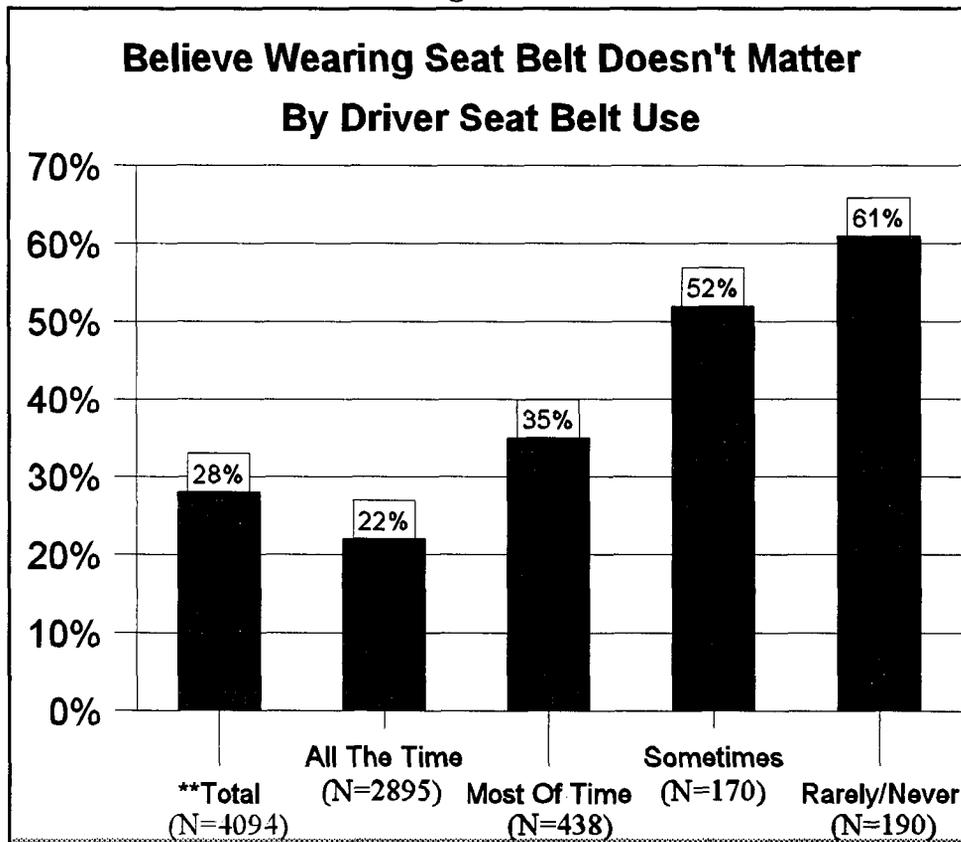
Qx: Do you agree or disagree that people have a choice to do what they can to avoid death and serious injury, so wearing a seat belt does matter.

****Base:** Total = Total population age 16+ (includes nondrivers).
 Usage frequencies = Drivers whose primary vehicle has seat belts.
 Unweighted N's listed above.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

In a second question, respondents were asked if they agreed or disagreed with the statement that “if it is your time to die, you’ll die, so it doesn’t matter whether you wear your seat belt.” Slightly more than one-quarter (28%) of the total population age 16 and older agreed. However, this fatalistic outlook became increasingly more prevalent as reported belt use declined, from 22% of drivers who said they wore their seat belts “all the time” to 61% of those who said they rarely or never wore their seat belts.

Figure 56



Qx: When driving this [car/truck/van] how often do you wear your {shoulder/lap} belt?
Qx: Do you agree or disagree that if it is your time to die, you’ll die, so it doesn’t matter whether you wear your seat belt?
****Base:** Total = Total population age 16+ (includes nondrivers).
 Usage frequencies = Drivers whose primary vehicle has seat belts.
 Unweighted N’s listed above.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Sex And Age Differences In Attitudes

Few differences emerged between the sexes in their levels of agreement with the attitude statements described in the previous sections of this Chapter. The largest gap was six percentage points as males (21%) were more likely than females (15%) to report that they would feel self-conscious around their friends if they wore a seat belt and the friends did not. More substantial differences appeared with respect to age. Almost one-half (48%) of 16-to-20-year-olds agreed

TABLE 31
Attitudes Concerning Risk Perception, Fatalism, And The Usefulness Of Seat Belts By Sex and Age

Qx: Now I'm going to read you a few statements. Please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree.

Base: Total population age 16+

| | Sex | | Age | | |
|--|----------|----------|---------|----------|---------|
| | Female | Male | 16-20 | 21-64 | 65+ |
| | (N=2185) | (N=1909) | (N=398) | (N=3171) | (N=479) |
| Strongly or Somewhat Agree: | | | | | |
| If I were in an accident, I would want to have my seat belt on. | 95% | 91% | 95% | 93% | 92% |
| Seat belts are just as likely to harm you as help you. | 41% | 36% | 48% | 37% | 38% |
| Medical insurance costs would be lower if more people wore seat belts | 69% | 66% | 82% | 65% | 70% |
| Putting on a seat belt makes me worry more about being in an accident. | 15% | 15% | 17% | 15% | 15% |
| An accident close to home is usually not as serious as an accident farther away. | 12% | 13% | 22% | 10% | 16% |

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

that seat belts were as likely to harm as to help, compared to 37% of those 21 to 64 and 38% of those 65 and older. The youngest age group also was more likely to agree that an accident close to home was usually not as serious, and that they would feel self-conscious if they were going against the group norm in wearing seat belts. Lastly, the youngest age group was significantly more likely to agree that insurance costs would be lower if more people wore seat belts. However, a number of teenagers in NHTSA focus groups have indicated that insurance costs were not an issue with them because they did not pay them, their parents did.

TABLE 31 (Continued)
Attitudes Concerning Risk Perception, Fatalism, And The Usefulness Of Seat Belts By Sex and Age

| | Sex | | Age | | |
|--|----------|----------|---------|----------|---------|
| | Female | Male | 16-20 | 21-64 | 65+ |
| | (N=2185) | (N=1909) | (N=398) | (N=3171) | (N=479) |
| Strongly or Somewhat Agree: | | | | | |
| I would feel self-conscious around my friends if I wore a seat belt and they did not. | 15% | 21% | 24% | 16% | 20% |
| Even if parents don't wear seat belts but require their children to wear them, then the children will almost always continue to wear seat belts when they've grown up. | 54% | 54% | 55% | 53% | 57% |
| Agree: | | | | | |
| People have a choice to do what they can to avoid death and serious injury, so wearing a seat belt does matter. | 89% | 87% | 87% | 89% | 87% |
| If it is your time to die, you'll die, so it doesn't matter whether you wear your seat belt. | 26% | 29% | 29% | 28% | 24% |

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Racial And Ethnic Differences In Attitudes

Blacks and Hispanics differed markedly from whites and non-Hispanics on perceived risk and the utility of seat belts. Whereas slightly more than one-third of whites (35%) and non-Hispanics (37%) agreed that seat belts were just as likely to harm as help you, about half of blacks (49%) and Hispanics (51%) agreed with the statement. Blacks and Hispanics also were about twice as likely as whites and non-Hispanics to agree that putting on a seat belt made them worry more about being in a crash, or that a crash close to home would not be as serious as one farther away.

TABLE 32
Attitudes Concerning Risk Perception, Fatalism, And The
Usefulness Of Seat Belts By Race and Ethnicity

Qx: Now I'm going to read you a few statements. Please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree.

Base: Total population age 16+

| | Race | | Ethnicity | |
|--|---------|----------|-----------|--------------|
| | Black | White | Hispanic | Non-Hispanic |
| | (N=427) | (N=3058) | (N=406) | (N=3652) |
| Strongly or Somewhat Agree: | | | | |
| If I were in an accident, I would want to have my seat belt on. | 95% | 93% | 96% | 93% |
| Seat belts are just as likely to harm you as help you. | 49% | 35% | 51% | 37% |
| Medical insurance costs would be lower if more people wore seat belts | 68% | 67% | 76% | 67% |
| Putting on a seat belt makes me worry more about being in an accident. | 25% | 11% | 27% | 13% |
| An accident close to home is usually not as serious as an accident farther away. | 20% | 9% | 26% | 11% |

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Hispanics (44%) were far more likely than the other groups to say they would feel self-conscious about using seat belts if their friends were not wearing them. Blacks (40%) were most likely to agree with the fatalistic statement that wearing a seat belt did not matter because if it was your time to die, you'll die.

TABLE 32 (Continued)
Attitudes Concerning Risk Perception, Fatalism, And The Usefulness Of Seat Belts By Race and Ethnicity

| | Race | | Ethnicity | |
|--|---------|----------|-----------|--------------|
| | Black | White | Hispanic | Non-Hispanic |
| | (N=427) | (N=3058) | (N=406) | (N=3652) |
| Strongly or Somewhat Agree: | | | | |
| I would feel self-conscious around my friends if I wore a seat belt and they did not. | 25% | 13% | 44% | 15% |
| Even if parents don't wear seat belts but require their children to wear them, then the children will almost always continue to wear seat belts when they've grown up. | 65% | 51% | 64% | 53% |
| Agree: | | | | |
| People have a choice to do what they can to avoid death and serious injury, so wearing a seat belt does matter. | 87% | 89% | 86% | 89% |
| If it is your time to die, you'll die, so it doesn't matter whether you wear your seat belt. | 40% | 25% | 31% | 27% |

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Differences In Attitudes By Educational Level

Educational level also showed a relationship to the various attitudes. Generally, persons tended to be less fatalistic, less ambivalent about the injury reduction benefits of seat belts, and less self-conscious about going against group norms of non-use if they had more years of formal schooling.

TABLE 33
Attitudes Concerning Risk Perception, Fatalism, And The Usefulness Of Seat Belts By Education

Qx: Now I'm going to read you a few statements. Please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree.

Base: Total population age 16+

| | Education | | | |
|--|-----------------------|------------------|--------------|--------------|
| | Less Than High School | High School Grad | Some College | College Grad |
| | (N=521) | (N=1279) | (N=1004) | (N=1245) |
| Strongly or Somewhat Agree: | | | | |
| If I were in an accident, I would want to have my seat belt on. | 94% | 90% | 94% | 96% |
| Seat belts are just as likely to harm you as help you. | 53% | 46% | 35% | 25% |
| Medical insurance costs would be lower if more people wore seat belts | 73% | 66% | 65% | 69% |
| Putting on a seat belt makes me worry more about being in an accident. | 23% | 18% | 13% | 9% |
| An accident close to home is usually not as serious as an accident farther away. | 23% | 13% | 10% | 8% |

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

TABLE 33 (Continued)
Attitudes Concerning Risk Perception, Fatalism, And The
Usefulness Of Seat Belts By Education

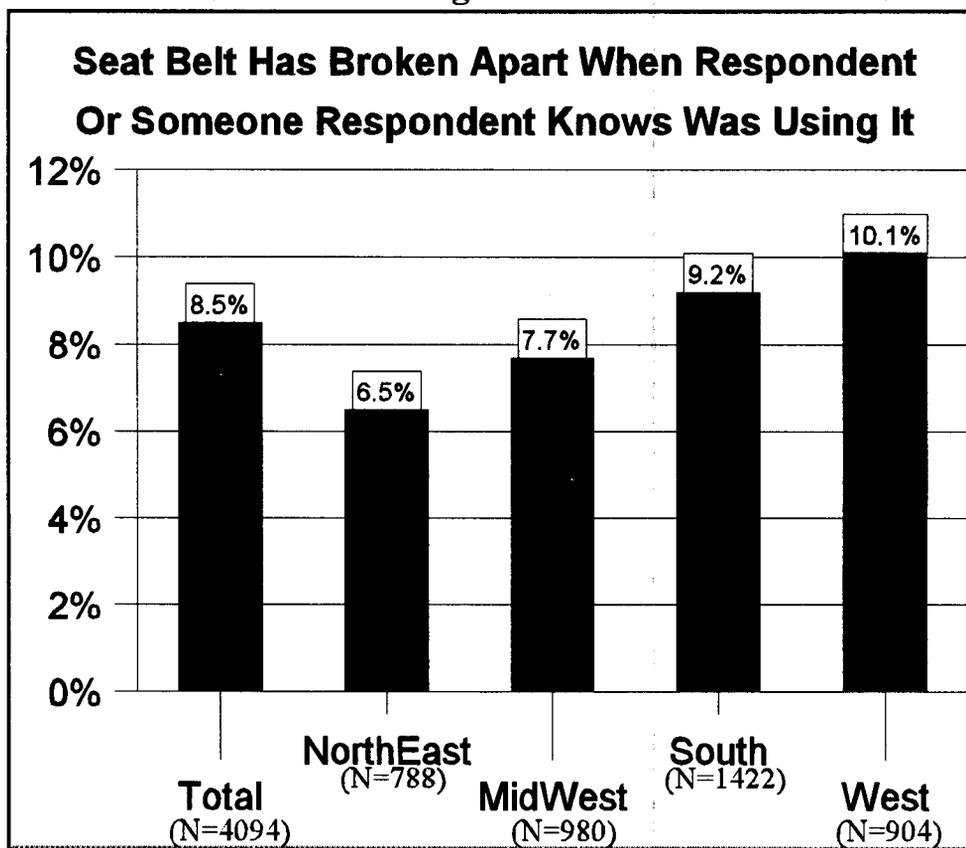
| | Education | | | |
|--|--------------------------|---------------------|-----------------|-----------------|
| | Less Than High School | High School Grad | Some College | College Grad |
| | (N=521) | (N=1279) | (N=1004) | (N=1245) |
| Strongly or Somewhat Agree: | | | | |
| I would feel self-conscious around my friends if I wore a seat belt and they did not. | 34% | 18% | 14% | 13% |
| Even if parents don't wear seat belts but require their children to wear them, then the children will almost always continue to wear seat belts when they've grown up. | 66% | 58% | 48% | 47% |
| Agree: | | | | |
| People have a choice to do what they can to avoid death and serious injury, so wearing a seat belt does matter. | 86% | 86% | 89% | 93% |
| If it is your time to die, you'll die, so it doesn't matter whether you wear your seat belt. | 41% | 34% | 24% | 16% |

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Experience With Seat Belt Failures

Certain climates may cause deterioration in seat belts over time, such as belts becoming brittle due to extreme heat. About one-in-twelve persons (8.5%) reported that a seat belt had broken apart when they or someone they knew was using it. The figure ranged from 6.5% in the Northeast to 10.1% in the West.

Figure 57



Qx: Has a seat belt ever broken apart when either you or someone you know was using it?

Base: Total population age 16+

Unweighted N's listed above.

NorthEast: CT, ME, MA, NH, NJ, NY, PA, RI, VT

MidWest: IL, IN, IA, KS, MI, MN, MO, NE, ND, OH, SD, WI

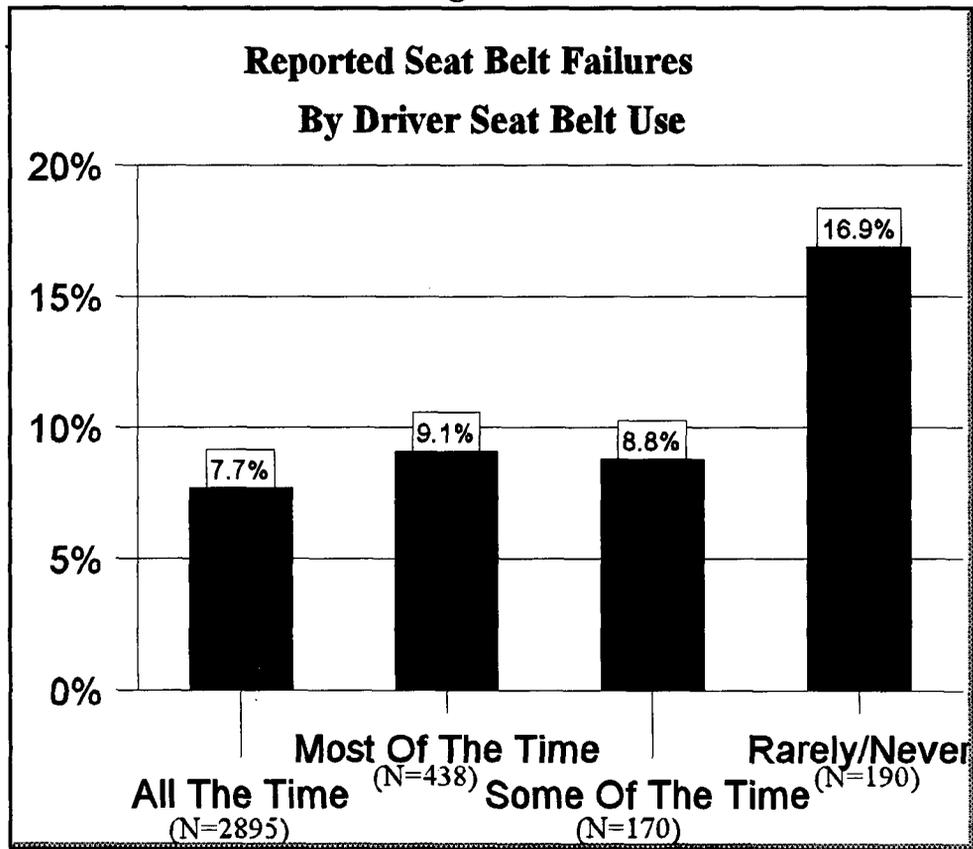
South: AL, AR, DE, DC, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, WV

West: AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, WY

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Drivers who rarely or never wore seat belts were most likely to report seat belt failures (17%) compared to the other belt usage groups. The reason is open to conjecture. For example, one could hypothesize that their lower belt use was a consequence of the failures. Conversely, since the question was not restricted to personal experience, some non-users may have accepted unverified stories or incidents to support their behavior. Nonetheless, because of the small number of non-users, most of the reported cases of seat belt failure in the survey came from drivers who said they regularly wore their seat belts.

Figure 58



Qx: Has a seat belt ever broken apart when either you or someone you know was using it?

Base: Drivers whose primary vehicle has seat belts.

Unweighted N's listed above.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

1998 SURVEY RESULTS

CHAPTER 4

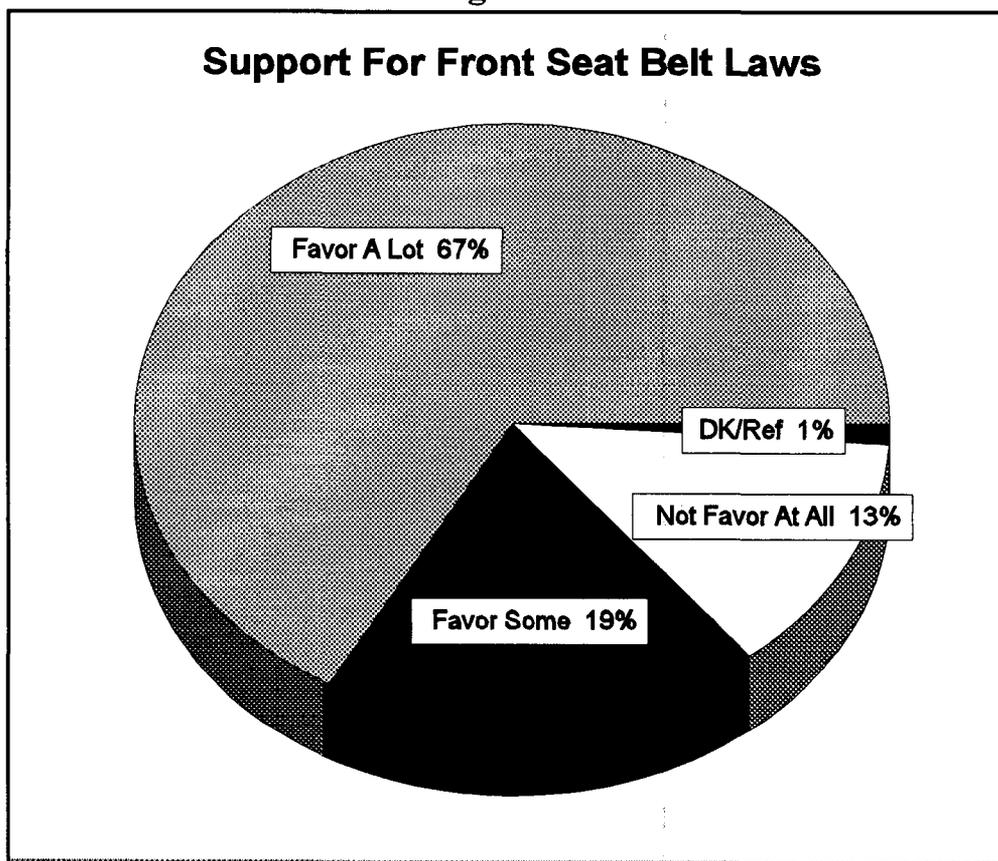
**ATTITUDES, KNOWLEDGE, AND EXPERIENCE
WITH SEAT BELT LAWS AND THEIR
ENFORCEMENT**

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Attitudes Toward Seat Belt Laws

During the time the survey was administered, 49 states plus the District of Columbia had laws requiring seat belt use that were applicable to adults, New Hampshire being the exception (see Appendix B). Respondents were asked their attitudes about enactment and enforcement of the laws, their knowledge of the seat belt laws in their own State, and their personal experience with seat belt law enforcement. Most persons age 16 and older (86%) favored requiring drivers and front seat passengers to wear seat belts. Two-thirds (67%) favored such laws a lot, and an additional 19% favored them somewhat. Thirteen percent did not favor driver and front seat passenger belt laws at all while 1% was unsure.

Figure 59



Qx: How do you feel about laws that require drivers and front seat passengers to wear seat belts?
Do you favor these laws a lot, do you favor them some, or do you not favor these at all?

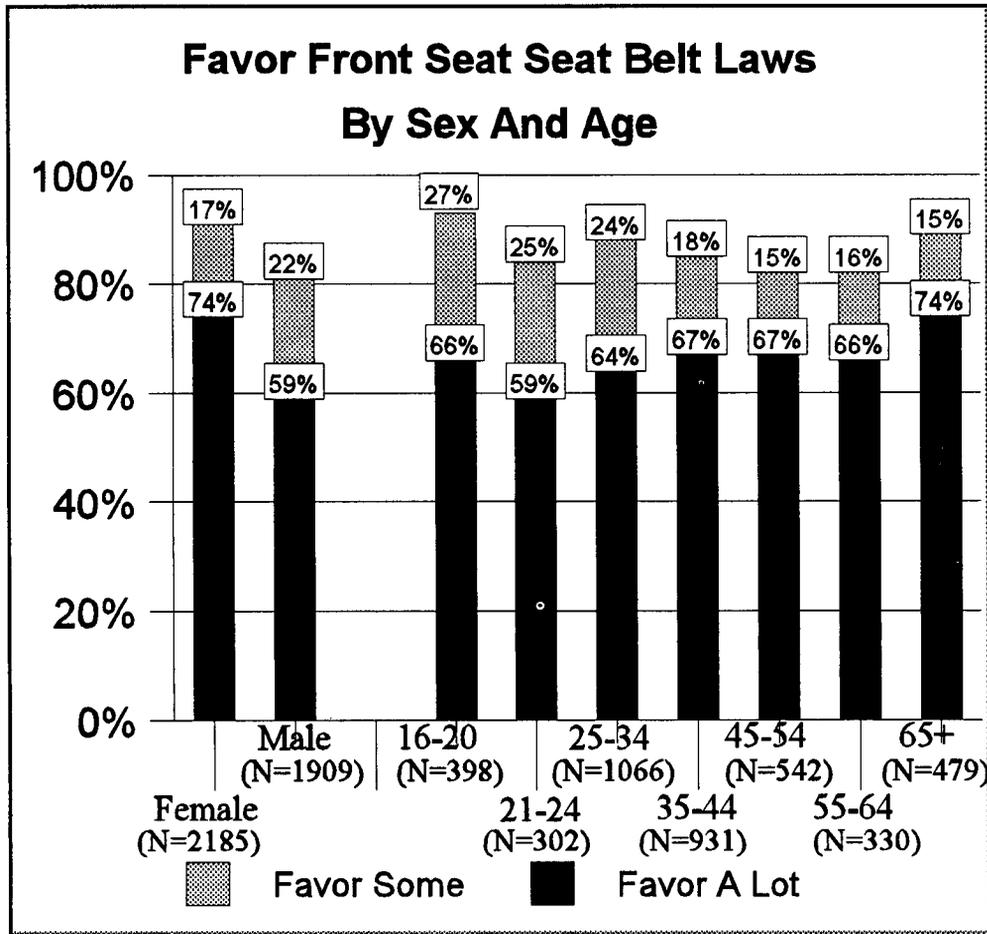
Base: Total population age 16+

Unweighted N=4094

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Females (91%) voiced stronger support for front seat belt laws than did males (80%)⁶. Support was also higher in the youngest age group (93%) compared to other age ranges, although much of this stemmed from a higher percentage of persons who said they only somewhat favored the laws.

Figure 60



Qx: How do you feel about laws that require drivers and front seat passengers to wear seat belts? Do you favor these laws a lot, do you favor them some, or do you not favor these laws at all?

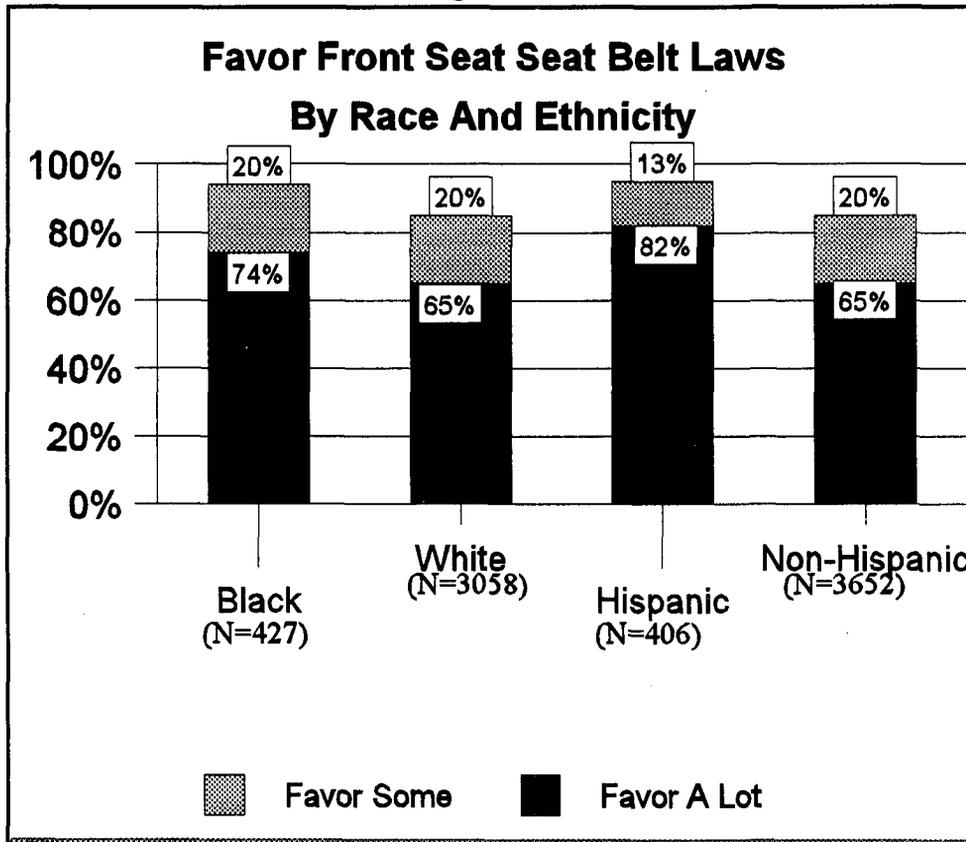
*Base: Total population age 16+
Unweighted N's listed above.*

⁶ This number differs from the sum of the two listed numbers in the Figure because of rounding. Similar differences appear on subsequent pages in this Chapter.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Blacks (94%) and Hispanics (95%) were more likely to express support for front seat belt laws than whites (84%) and non-Hispanics (85%). This pattern of greater support among minority groups for legislation and enforcement was repeated on other questionnaire items addressed in this Chapter.

Figure 61



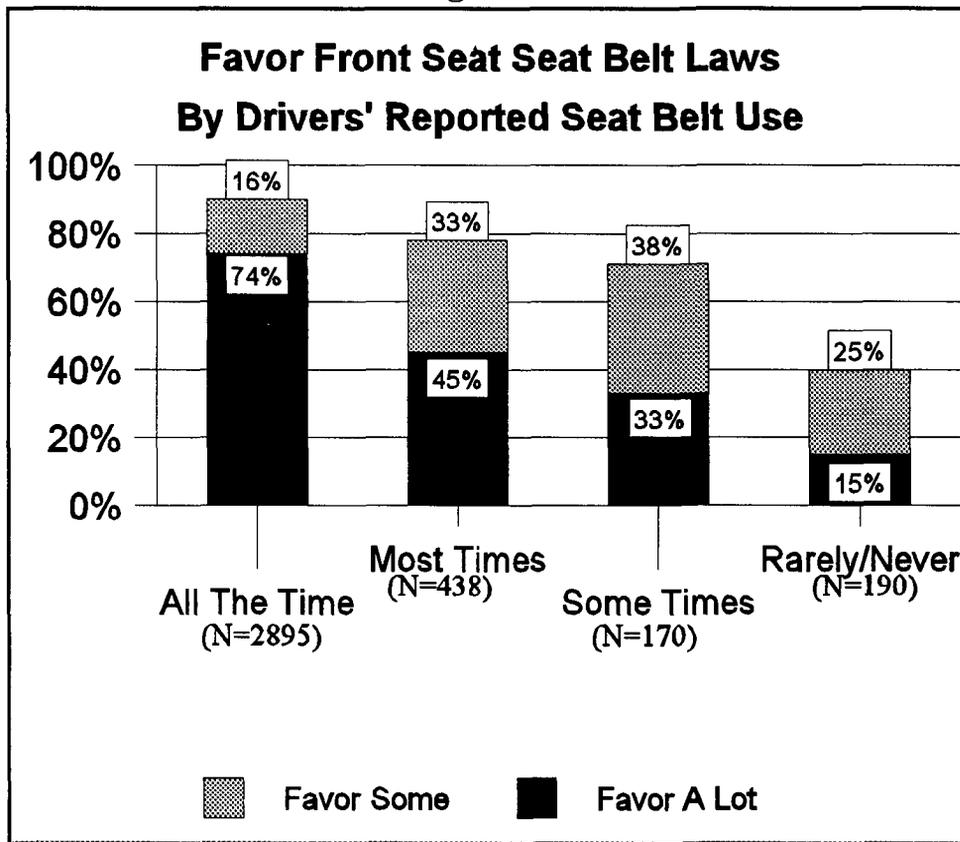
Qx: How do you feel about laws that require drivers and front seat passengers to wear seat belts? Do you favor these laws a lot, do you favor them some, or do you not favor these laws at all?

*Base: Total population age 16+
Unweighted N's listed above.*

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

As expected, support for seat belt laws was strongest among those who used their seat belt most often. Nine-in-ten drivers (90%) who said they used their seat belt “all of the time” favored front seat belt laws “a lot” or “some.” The figure dropped to 78% of “most of the time” seat belt users, and 71% of “some of the time” users. Among drivers who rarely or never wore seat belts, 40% said they favored laws requiring seat belt use by drivers and front seat passengers.

Figure 62



Qx: When driving this (car/truck/van) how often do you wear your (shoulder/lap) belt?

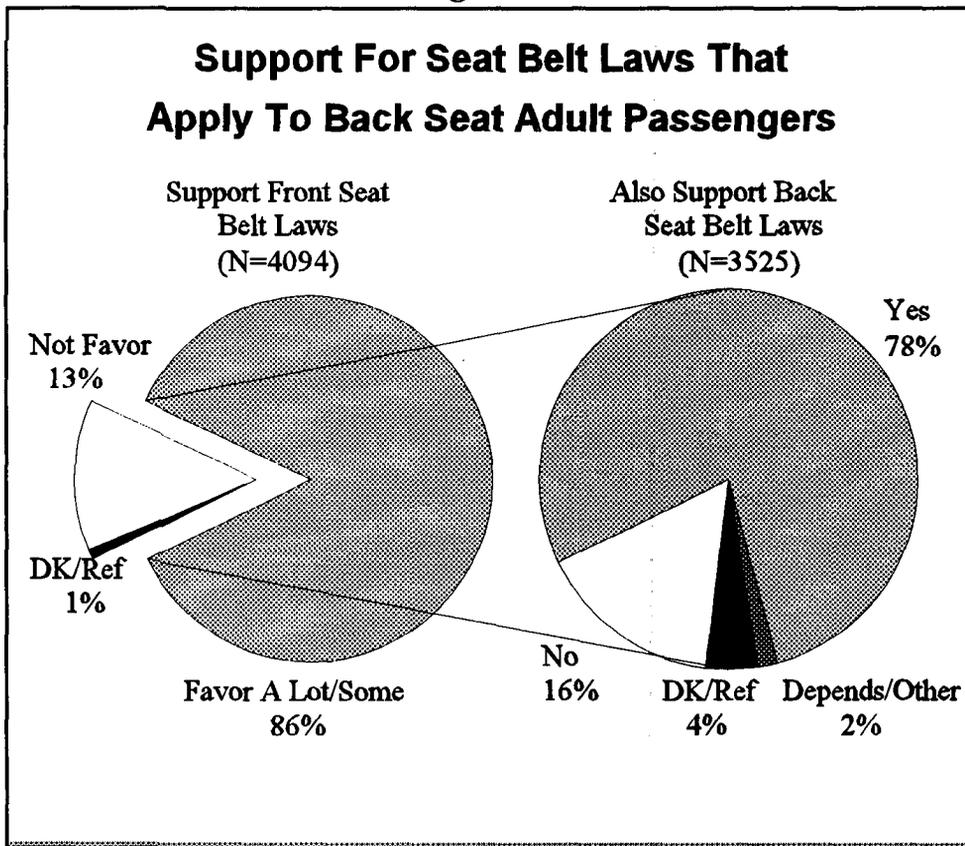
Qx: How do you feel about laws that require drivers and front seat passengers to wear seat belts? Do you favor these laws a lot, do you favor them some, or do you not favor these laws at all?

*Base: Drivers whose primary vehicle has seat belts
Unweighted N's listed above.*

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

More than three-quarters (78%) of those who favored laws requiring seat belt use in the front seat also favored applying the law to the back seat. This means that two-thirds (67%) of the total population age 16 and older supported seat belt laws applying to both the front and back seats (78% of the 86% who favored front seat laws).

Figure 63



Qx: How do you feel about laws that require drivers and front seat passengers to wear seat belts? Do you favor these laws a lot, do you favor them some, or do you not favor these laws at all?

Qx: Do you think that seat belt laws should also apply to back seat adult passengers?

Base: Pie 1: Total population age 16+

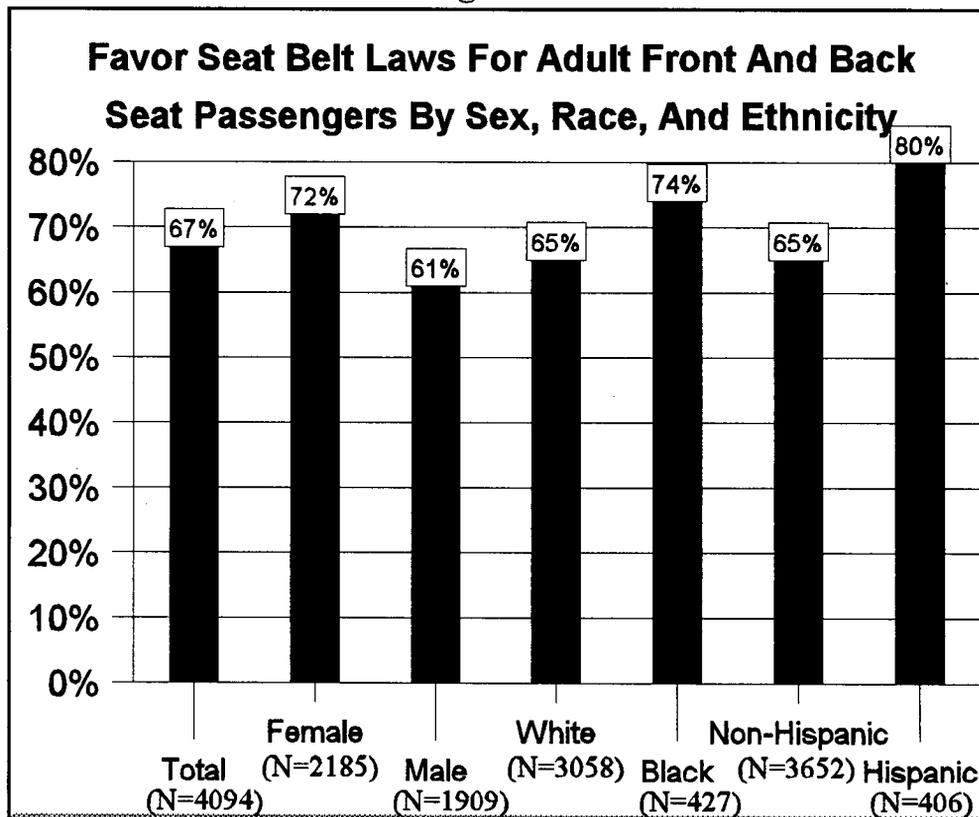
Pie 2: Those who favor front seat belt laws

Unweighted N's listed above.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

As noted on the previous page, 78% of persons who believed that drivers and front seat passengers should be required to wear seat belts also favored the law applying to back seat passengers as well, which equated to 67% favoring both front and back seat laws. The percentage of front seat law supporters who also supported back seat laws stayed in the 75-80% range for males (76%), females (79%), blacks (79%), whites (77%), and non-Hispanics (77%). Hispanics were a bit higher at 84%, which widened the difference with non-Hispanics shown on page 114 when support for front and back seat laws was combined.

Figure 64



Qx: How do you feel about laws that require drivers and front seat passengers to wear seat belts? Do you favor these laws a lot, do you favor them some, or do you not favor these laws at all?

Qx: Do you think that seat belt laws should also apply to back seat adult passengers?

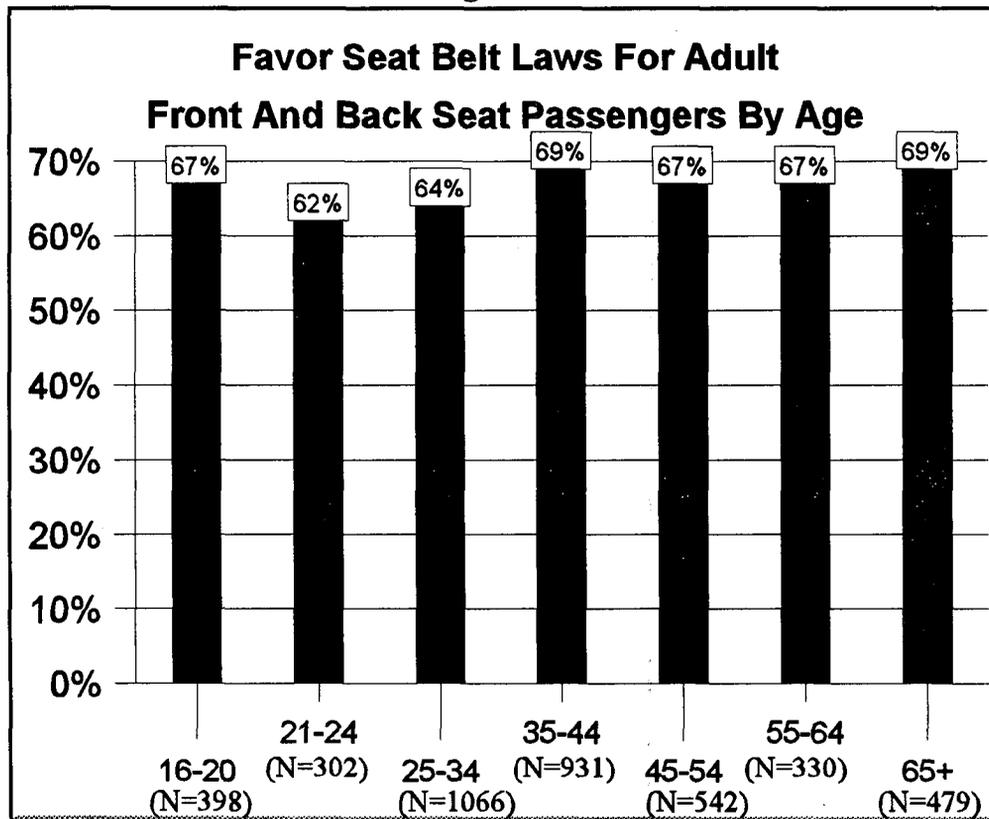
Base: Total population age 16+

Unweighted N's listed above.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

While the youngest age group was most likely to say they favored a front seat law (see page 113), they were similar to most other age groups when support for front and back seat laws was combined. This was because younger age groups (below age 35) who supported the front seat law were less supportive of also applying the law to the back seat compared to older age groups.

Figure 65



Qx: How do you feel about laws that require drivers and front seat passengers to wear seat belts? Do you favor these laws a lot, do you favor them some, or do you not favor these laws at all?

Qx: Do you think that seat belt laws should also apply to back seat adult passengers?

Base: Total population age 16+

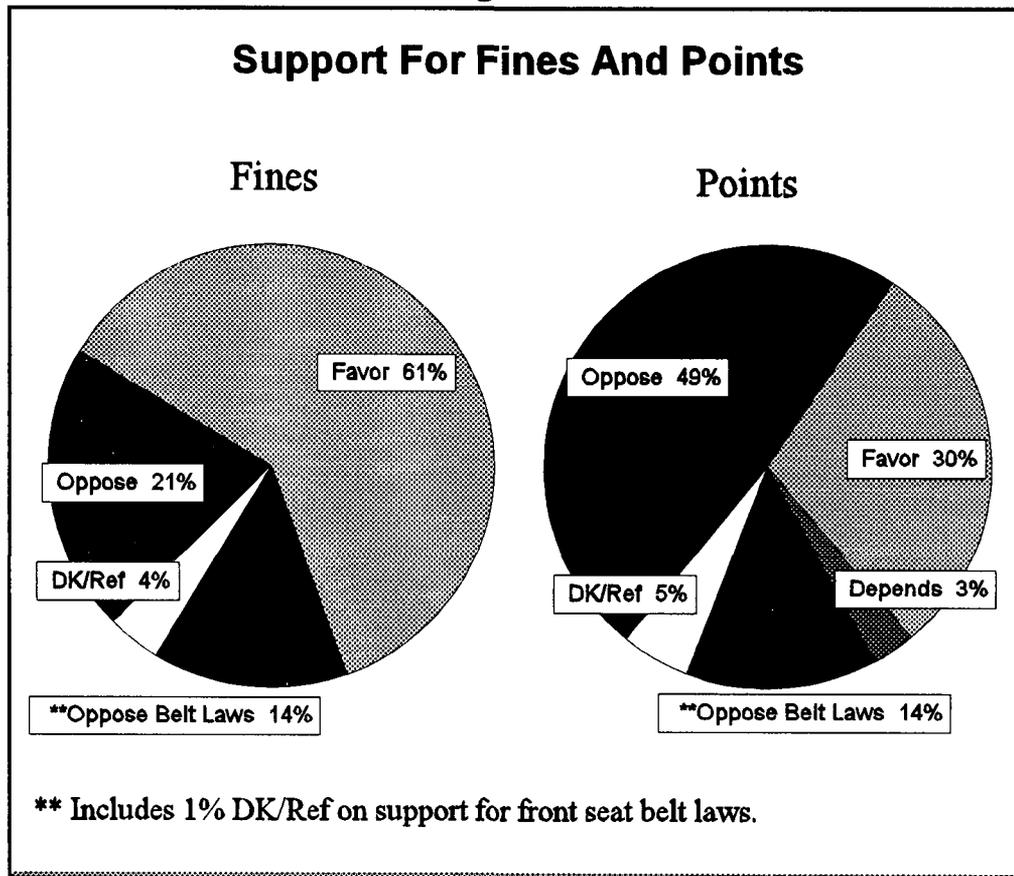
Unweighted N's listed above.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Attitudes Toward Enforcement Of Seat Belt Laws

The public tended to favor enforcing seat belt laws with fines, but not with points on the driver's license. About three-fifths (61%) of the population age 16 and older supported fines for drivers who did not wear seat belts. About half that many (30%) supported points against the license as a penalty, with another 3% saying it depended on past violations. As indicated on page 112, 14% of the population opposed front seat belt laws entirely or did not know if they did.

Figure 66



Qx: Do you favor or oppose fines for drivers who do not wear seat belts?

Qx: Do you favor or oppose receiving points against a license as a penalty for seat belt violations?

Base: Total population age 16+

Unweighted N=4094

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Among the demographic groups listed below, reported support for fines as a penalty for seat belt violations was greatest among Hispanics (75%), blacks (67%), and females (67%). Reported support for points was greatest among Hispanics (46%) and youth ages 16-20 (39%).

TABLE 34
Support For Fines And Points By Sex, Age, Race, And Ethnicity

Qx: Do you favor or oppose fines for drivers who do not wear seat belts?

Qx: Do you favor or oppose receiving points against a license as a penalty for seat belt violations?

| | *Fines | | | *Points | | | N-Size |
|--------------|--------|--------|--------------------|---------|--------|--------------------|--------|
| | Favor | Oppose | **Oppose Belt Laws | Favor | Oppose | **Oppose Belt Laws | |
| Total | 61% | 21% | 14% | 30% | 49% | 14% | (4094) |
| Sex | | | | | | | |
| Female | 67% | 18% | 9% | 33% | 48% | 9% | (2185) |
| Male | 54% | 23% | 20% | 27% | 49% | 20% | (1909) |
| Age | | | | | | | |
| 16-20 | 61% | 29% | 7% | 39% | 52% | 7% | (398) |
| 21-24 | 60% | 24% | 15% | 29% | 50% | 15% | (302) |
| 25-34 | 62% | 22% | 12% | 30% | 52% | 12% | (1066) |
| 35-44 | 62% | 20% | 15% | 29% | 49% | 15% | (931) |
| 45-54 | 59% | 20% | 18% | 25% | 50% | 18% | (542) |
| 55-64 | 61% | 17% | 18% | 30% | 43% | 18% | (330) |
| 65+ | 61% | 18% | 12% | 32% | 43% | 12% | (479) |
| Race | | | | | | | |
| Black | 67% | 21% | 6% | 35% | 52% | 6% | (427) |
| White | 59% | 20% | 16% | 27% | 49% | 16% | (3058) |
| Ethnicity | | | | | | | |
| Hispanic | 75% | 18% | 5% | 46% | 42% | 5% | (406) |
| Non-Hispanic | 59% | 21% | 15% | 28% | 49% | 15% | (3652) |

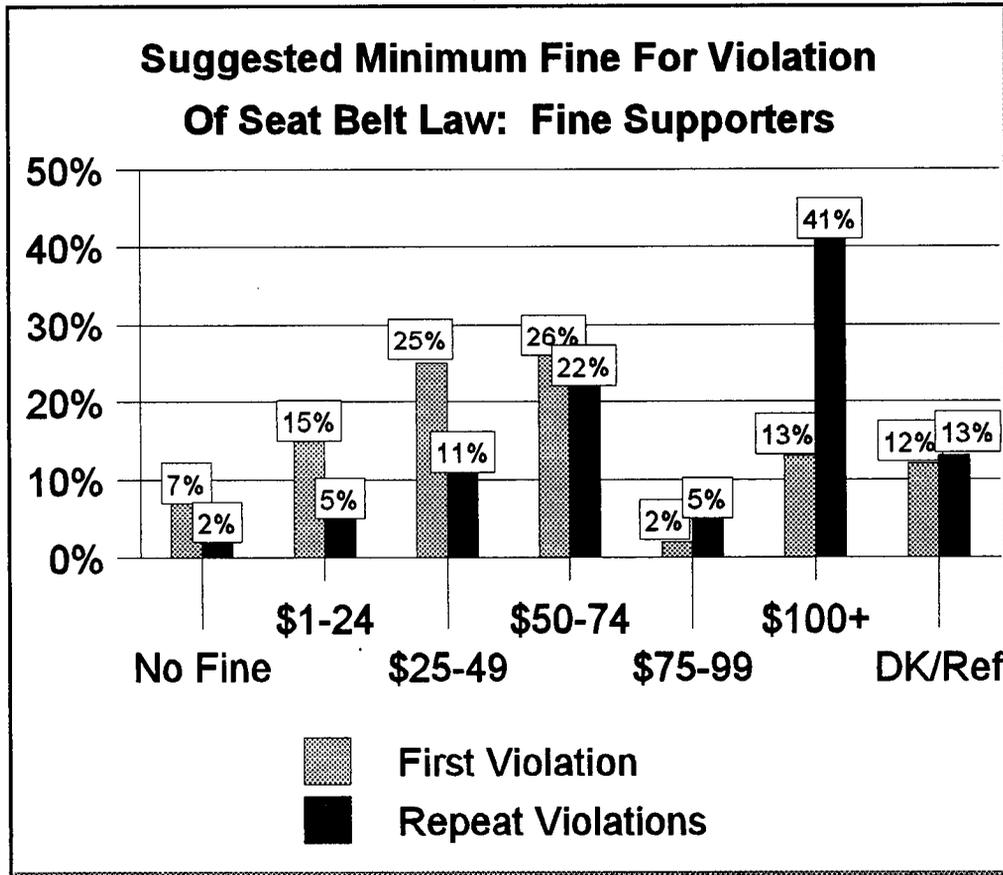
**The three response categories (Favor/Oppose/Oppose Belt Laws) do not sum to 100% because persons who answered DK/Ref or Depends to the questions on fines or points are not shown in the Table.*

***Includes those who did not know, or refused to say, if they supported front seat belt laws (they were not asked the question on fines or points). Depending on the group, this ranged from below 1% to 3%.*

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Interviewers asked those who supported fines as a sanction what they thought the minimum fine should be for the first seat belt violation. They then asked the same respondents what they thought the fine should be for repeat seat belt violations. If it was a first time violation, slightly less than half (47%) supported fines under \$50 (or no fine at all) while few (13%) supported fines of \$100 or more. However, the respondents generally favored stiffer fines if it was a repeat violation: only 18% supported fines under \$50 while 41% supported fines of \$100 or more.

Figure 67



Qx: What do you think the minimum fine should be for the first seat belt violation?

Qx: What do you think the minimum fine should be for repeat seat belt violations?

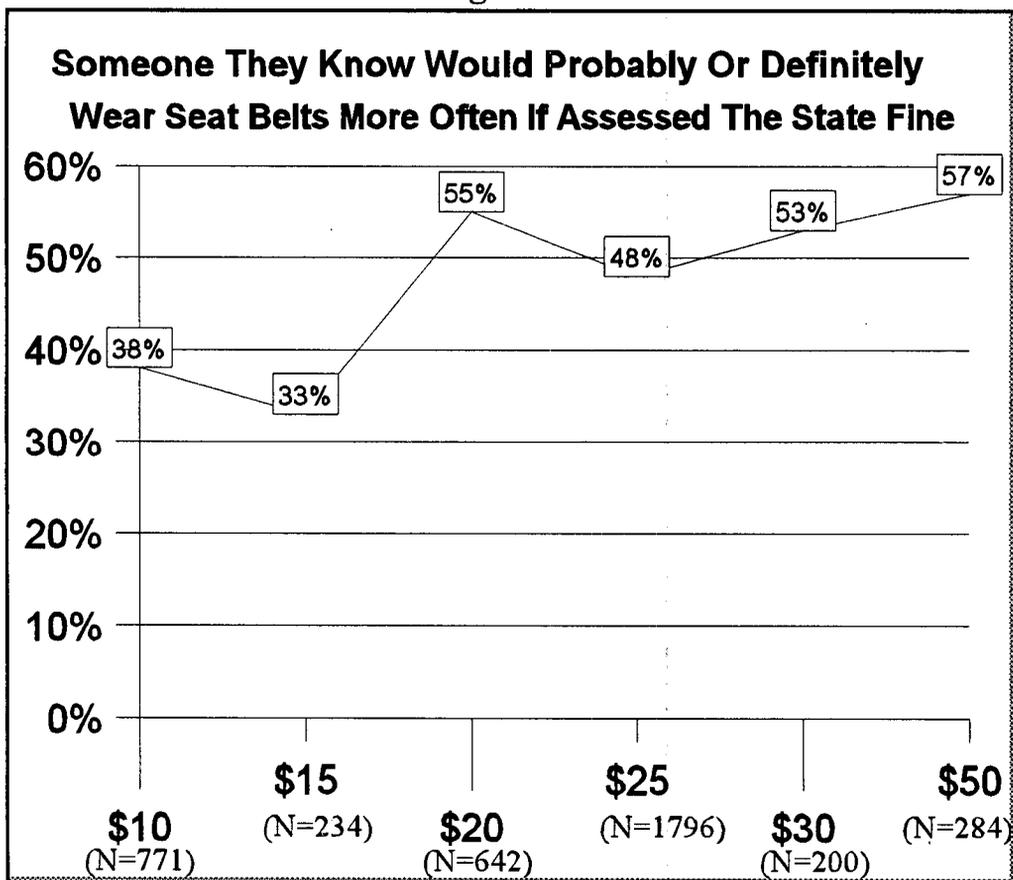
Base: Support fines for seat belt law violations.

Unweighted N=2494

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

The survey sought to determine whether the public believed that existing fine amounts can affect behavior. Respondents were asked if someone they knew who didn't use seat belts all the time would wear them more often if assessed the amount of the fine in their State (for three States where there was no law or set fine amount the interviewers used an amount of \$25). Figure 68 shows the results for those dollar amounts asked of 200 or more respondents. Only when the fine reached \$20 did half or more believe that belt use would increase. Yet even at \$50, many questioned the fine's effectiveness as 33% said there probably would be no change, 2% thought any change would be short term, 5% didn't know, and 3% said they didn't know anyone like that.

Figure 68



Qx: I'd like you to think about someone you know who doesn't wear seat belts all of the time. If that person were stopped and fined (Amount Of Fine In State) for not wearing seat belts, would this person definitely wear seat belts more often, probably wear seat belts more often, or probably not change his or her seat belt wearing habits?

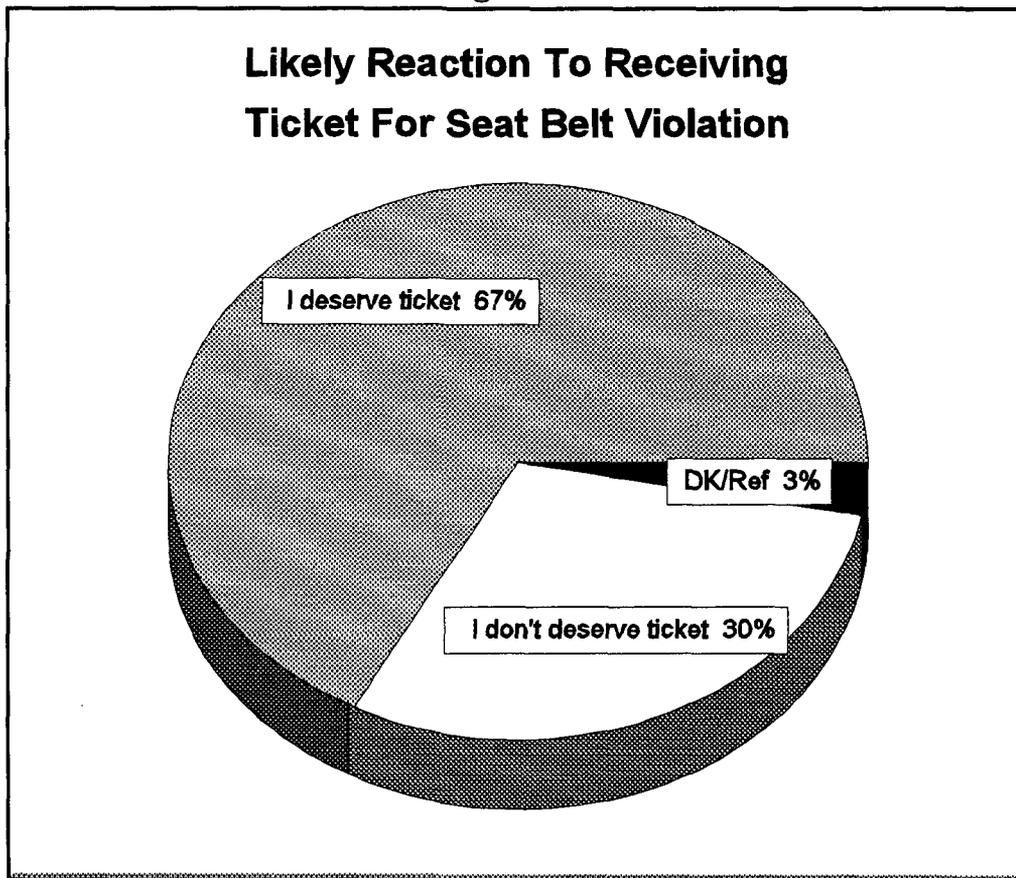
Base: Total population age 16+

Unweighted N's listed above

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Respondents were asked how they would likely react to getting a ticket for a seat belt violation. The interviewers gave respondents two choices and asked which was more likely: that they would believe they deserved the ticket because they broke the law, or they would believe the ticket was undeserved because wearing a seat belt should be a personal choice. This question was designed to enable comparison of the public's views about seat belt laws from the societal perspective (support for belt laws in principle) and the personal perspective (reaction to personally receiving some punishment for violating the laws). According to the data, two-thirds of the public (67%) would be more likely to believe that they deserved the ticket.

Figure 69



Qx: Suppose you get a ticket for not wearing your seat belt. Which of the following statements better describes your likely reaction? I deserve the ticket because I broke the law, or I do NOT deserve the ticket because wearing a seat belt should be a personal choice.

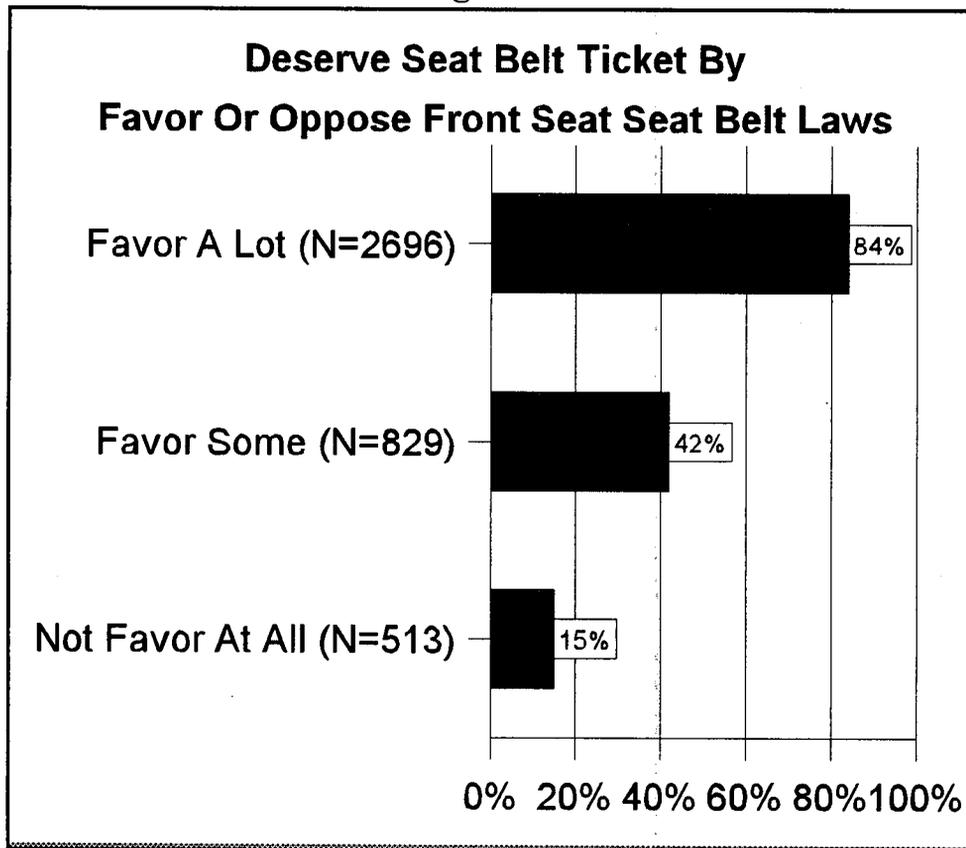
Base: Total population page 16+

Unweighted N=4094

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

The survey found attitudes toward seat belt laws in general, and attitudes about the fairness of personally receiving a ticket for a seat belt violation, to be fairly consistent with one another although not entirely so. About five out of six persons (84%) who said they favored front seat belt laws "a lot" also said they would deserve the ticket for breaking the law. This figure dropped by half to 42% for those who favored the laws "some." Still, 13% who favored the laws "a lot" responded that they would not deserve the ticket because it should be a personal choice (3% "did not know" their likely reaction or did not answer). Conversely, 15% of those who did not favor the laws at all said they would deserve the ticket.

Figure 70



Qx: How do you feel about laws that require drivers and front seat passengers to wear seat belts? Do you favor these laws a lot, do you favor them some, or do you not favor these laws at all?

Qx: Suppose you get a ticket for not wearing your seat belt. Which of the following statements better describes your likely reaction? I deserve the ticket because I broke the law, or I do NOT deserve the ticket because wearing a seat belt should be a personal choice.

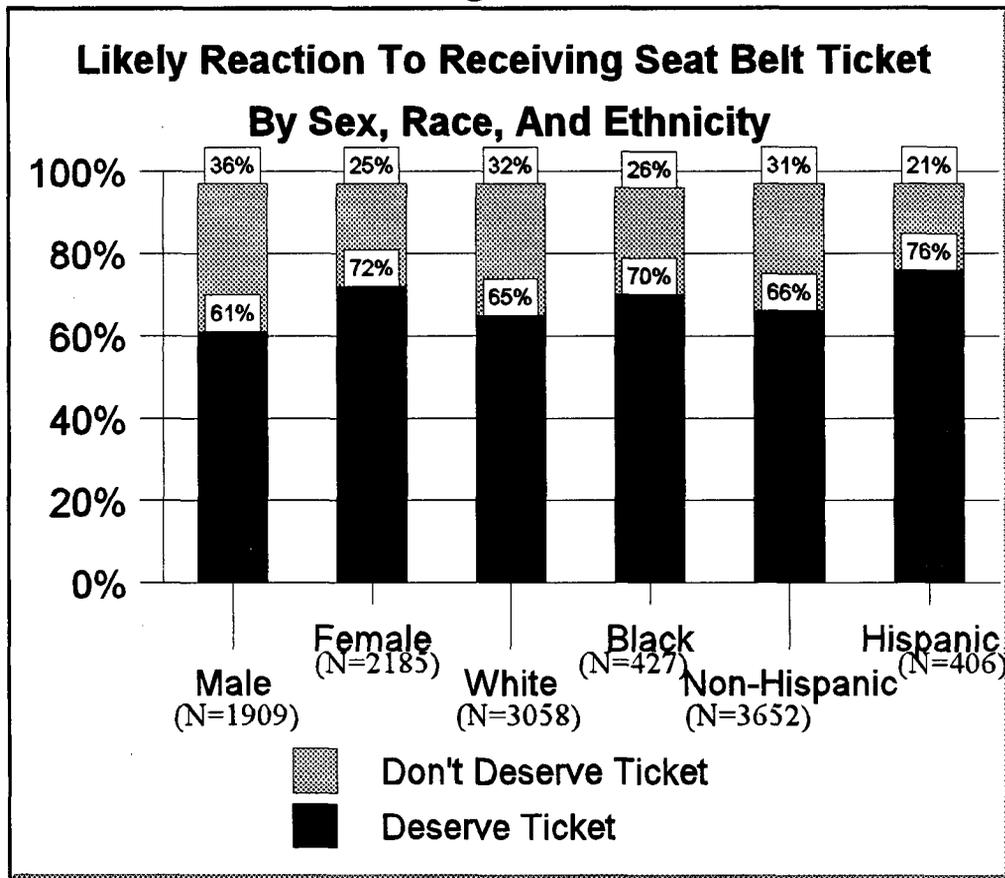
Base: Total population page 16+

Unweighted N's listed above

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Females (72%) were more likely than males (61%) to believe that their probable reaction would be that they deserved the ticket. More than one-third of males (36%) instead chose the argument that they did not deserve the ticket because it should be a personal choice. In addition, Hispanics (76%) and blacks (70%) were more likely than non-Hispanics (66%) and whites (65%) to answer that they likely would feel that they deserved the ticket.

Figure 71



Qx: Suppose you get a ticket for not wearing your seat belt. Which of the following statements better describes your likely reaction? I deserve the ticket because I broke the law, or I do NOT deserve the ticket because wearing a seat belt should be a personal choice.

Base: Total population page 16+

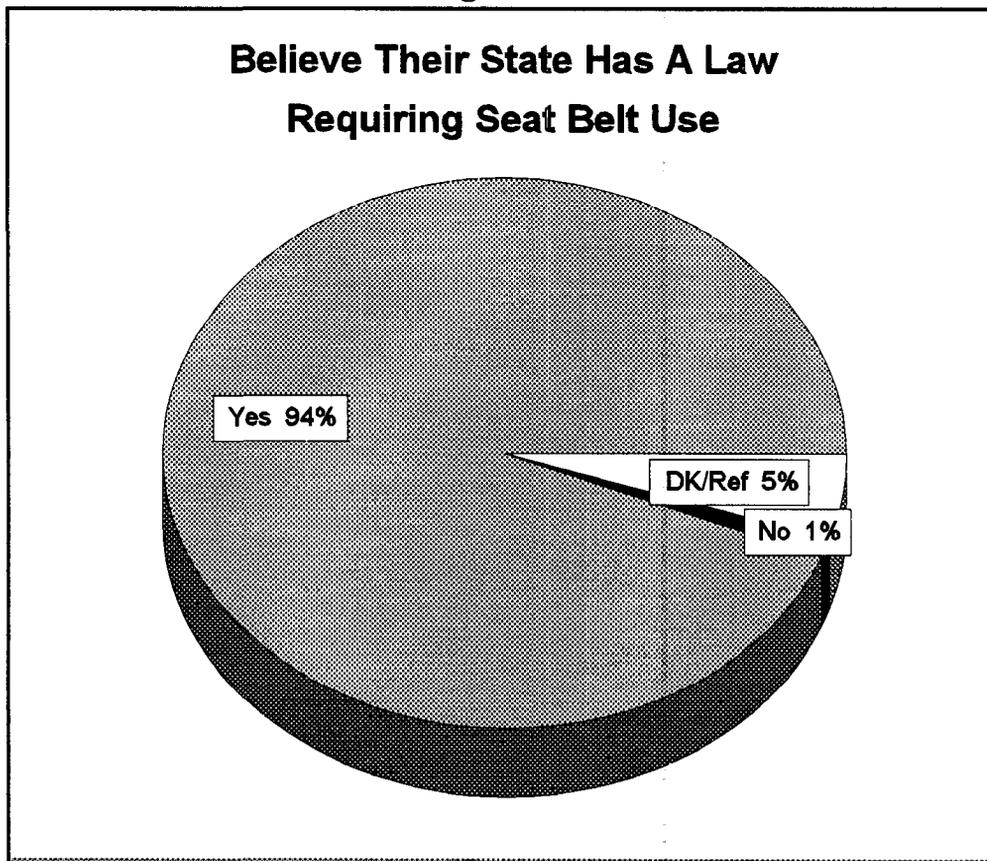
Unweighted N's listed above.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Knowledge Of State Seat Belt Laws

Interviewers asked respondents whether or not their State had a seat belt law, and then asked questions about the law's coverage and enforcement guidelines. Most people (94%) believed their State did indeed have a seat belt law. Those that didn't were usually uncertain about the existence of a State law. At the time of the survey, New Hampshire was the only State not having a seat belt law applicable to adults. When the few survey cases from New Hampshire (18) were excluded from the analysis, the percentage of those who believed there was a State law remained unchanged at 94%. Interestingly, of the 18 cases from New Hampshire, 5 thought there was a State law applicable to drivers, and some others were unsure.

Figure 72



Qx: Does (STATE) have a law requiring seat belt use?

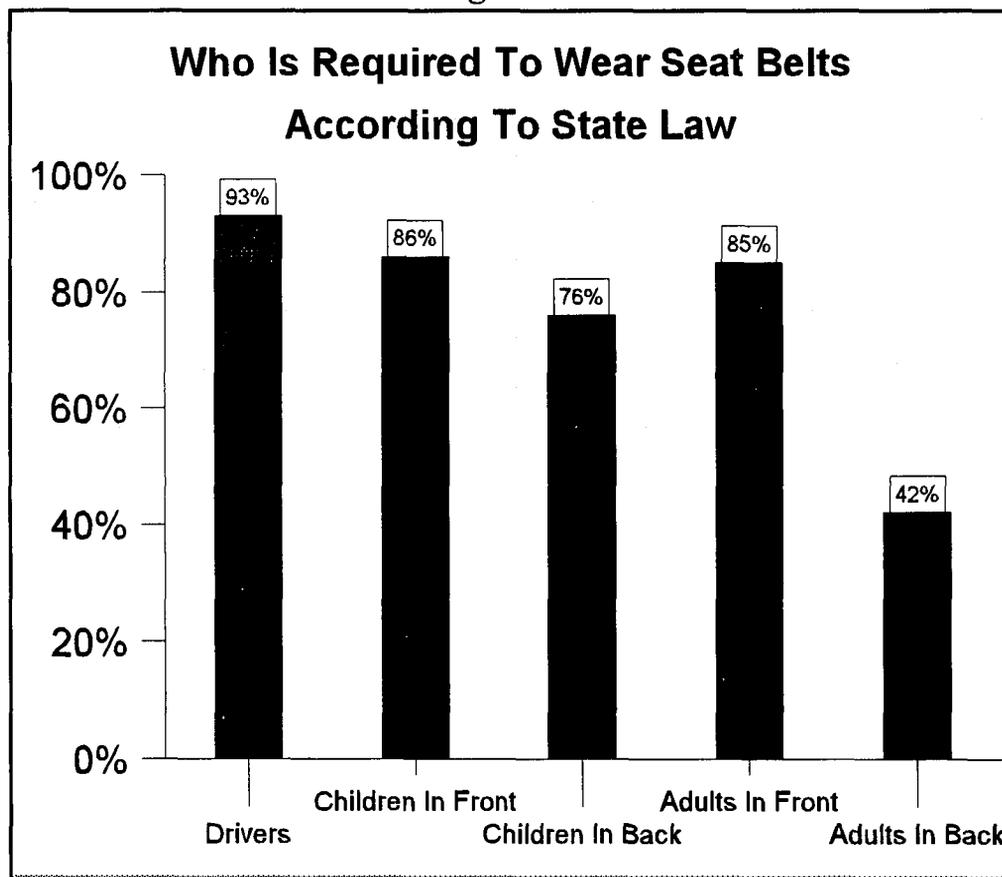
Base: Total population age 16+

Unweighted N=4094

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Those persons who believed their State had a law requiring seat belt use were asked who the law covered. NHTSA changed the structure of this question for the 1998 survey. According to the restructured format, the interviewers asked the respondents if each of the following groups was required to wear seat belts: drivers, children in the front seat, children in the back seat, adult passengers in the front seat, and adult passengers in the back seat. The respondents most often said the law covered drivers (93%), children in the front (86%), and adult passengers in the front (85%). Many thought the law also covered children in the back (76%). Fewer than half (42%) assumed that adults were required to wear seat belts in the back seat.

Figure 73



Qx: Who is required to wear seat belts according to your state law? Are (READ ITEM) required to wear seat belts?

Base: Believe their State has a seat belt law.

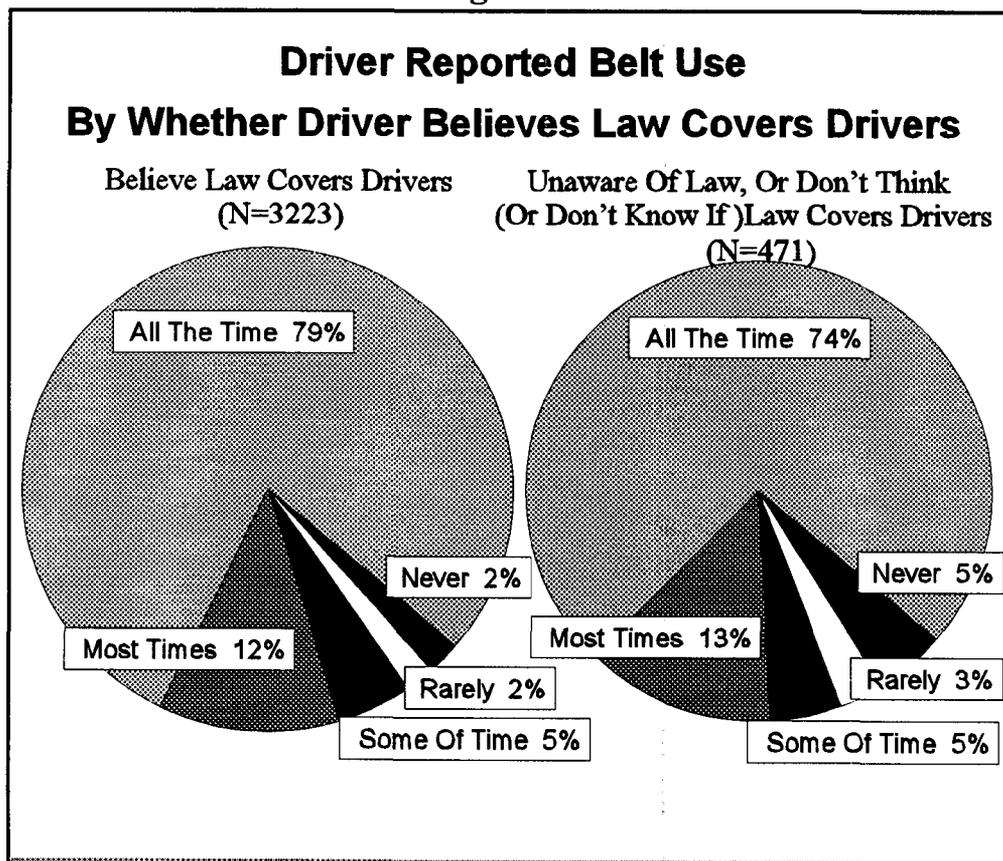
Unweighted N=3839

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

The next three pages show self-reported belt use for a specific seating position for persons who believed there was a law requiring usage in that seating position. For purposes of comparison, these pages also present self-reported belt use for persons who did not believe there was a law, or did not believe that seating position was covered by the law, or said they were unsure if that seating position was covered by the law.

Among drivers who thought there was a law requiring drivers to wear seat belts, 79% said they used their seat belt “all of the time” while driving. If they did not say that drivers were covered by the law, 74% said they wore their seat belts “all the time” while driving.

Figure 74



Qx: Who is required to wear seat belts according to your state law? Are (READ ITEM) required to wear seat belts?

Qx: When driving this (car/truck/van) how often do you wear your (shoulder/lap) belt?

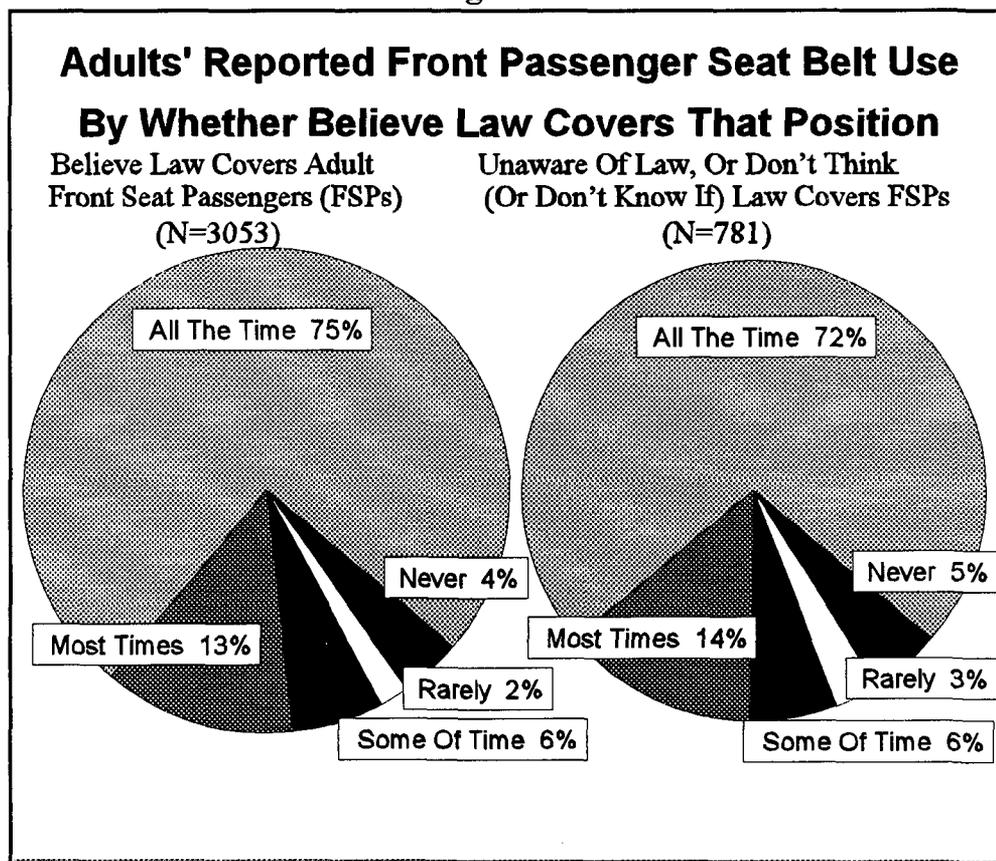
Base: Drivers whose primary vehicle has seat belts.

Unweighted N's listed above.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Recorded differences in self-reported seat belt use were even smaller for the front seat passenger side. Three-fourths (75%) of those who said there was a seat belt law that covered adult front seat passengers also reported that they always wore their seat belt when sitting as passengers in the front seat. This compared to 72% of those who were unaware of a law, or did not say it covered front seat adult passengers.

Figure 75



Qx: Who is required to wear seat belts according to your state law? Are (READ ITEM) required to wear seat belts?

Qx: When riding as a passenger in the front seat how often do you wear your seat belt?

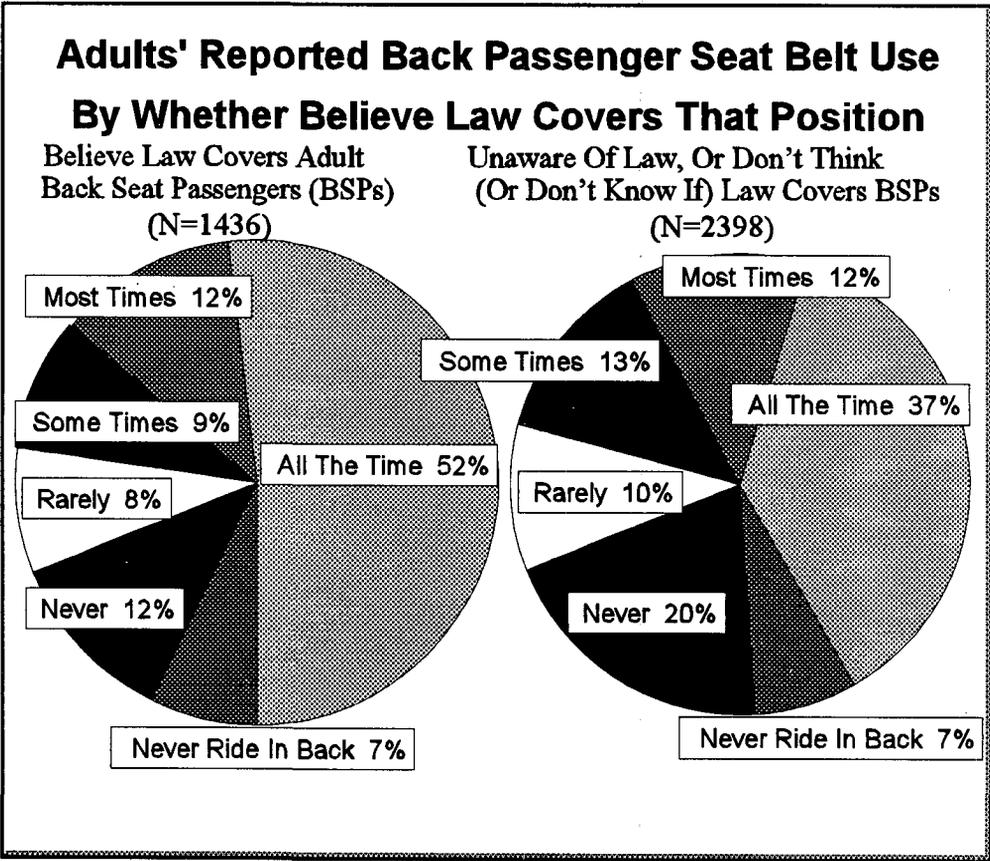
Base: Persons who at least on occasion ride as passengers.

Unweighted N's listed above.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

The law appeared to make the greatest difference for seat belt use in the rear seating position. Among those who thought there was a law that covered the back seat, 52% said they used their seat belt “all the time” when riding in the back. Absent that knowledge, only 37% answered that they wore their seat belt “all of the time” while riding in the back seat.

Figure 76



Qx: Who is required to wear seat belts according to your state law? Are (READ ITEM) required to wear seat belts?

Qx: When riding as a passenger in the back seat, how often do you wear your seat belt?

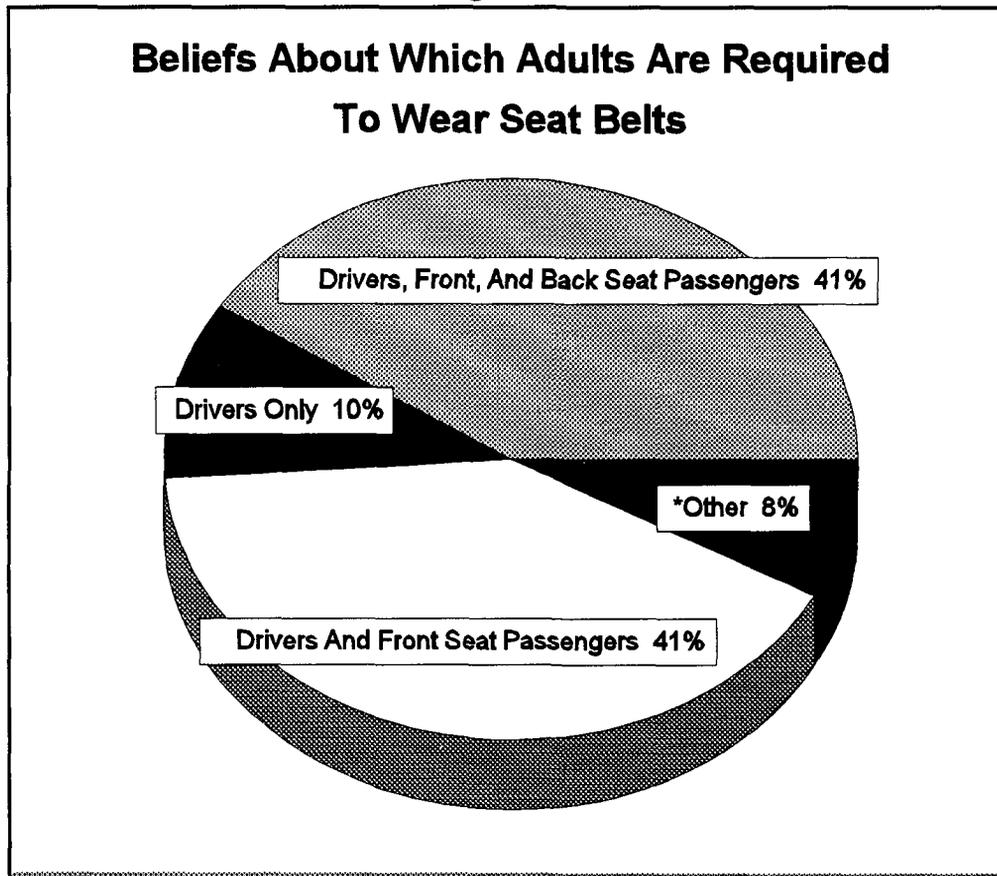
Base: Persons who at least on occasion ride as passengers.

Unweighted N's listed above.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Figure 77 segments those persons who thought there was a State law into groups based on the extent they believed that the law covered adults. Forty-one percent believed that the law applied to all adults in the vehicle (drivers, passengers in the front, and passengers in the back). The same percentage (41%) thought that the law applied to drivers and front seat adult passengers, but not adults in the back. Ten percent answered that the law applied to drivers only. The remainder of the respondents (8%) either provided a different permutation from the combinations possible, or else indicated that they did not know who the law covered.

Figure 77



Qx: Who is required to wear seat belts according to your state law? Are (READ ITEM) required to wear seat belts?

Base: Believe their State has a seat belt law.

Unweighted N=3839

**Includes 3.5% Don't Know/Refused, 2.6% front passenger only, 0.8% children only, 0.4% drivers and back seat passengers, 0.2% front and back passengers only, and 0.1% back seat passengers only.*

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

The greater the coverage of the law, the more likely that persons could correctly identify who in the vehicle was required to wear seat belts. In States where all seating positions were covered, 70% of the respondents correctly agreed that drivers, adult front seat passengers, and adult back seat passengers were required to wear seat belts. If the State law only covered the front seating positions, then fewer than half (49%) correctly agreed that drivers and adult front seat passengers, but not adult back seat passengers, were required to wear seat belts. Another 32% in these States believed that all seating positions were covered. This suggested that if they were unsure of all of the details of their State law, people tended to believe it covered the driver plus all passengers.

TABLE 35
Beliefs About Who Is Required To Wear Seat Belts
By Seating Positions Covered By State Law

Qx: Who is required to wear seat belts according to your state law? Are (READ ITEM) required to wear seat belts?

Base: Believe that State has a seat belt law.

| Who Public Believes Is Required To Wear Seat Belts | What State Law Actually Requires | |
|--|--|---|
| | Driver and All Passengers To Wear Seat Belts (N=895) | Only Driver And Front Seat Passengers To Wear Seat Belts (N=2932) |
| Driver and All Passengers | 70% | 32% |
| Driver Only | 8% | 11% |
| Driver and Front Seat Passengers | 16% | 49% |
| Other/DK/Ref | 6% | 8% |

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Pages 128-130 examined self-reported seat belt use according to beliefs about what seating positions were covered by the State law. Table 36 summarizes self-reported seat belt use according to the actual provisions of the State law. The results were similar; the major difference occurred in the back seat. Without a back seat provision, people were far less likely to report wearing their seat belt while riding in the back seating position.

TABLE 36
Self-Reported Seat Belt Use
By Seating Positions Covered By State Law

Qx: When driving this (car/truck/van), how often do you wear your (shoulder/lap) belt?
Qx: When riding as a passenger in the front seat how often do you wear your seat belt?
Qx: When riding as a passenger in the back seat how often do you wear your seat belt?
Base: Drivers whose primary vehicle has seat belts/Persons who at least on occasion ride as passengers.

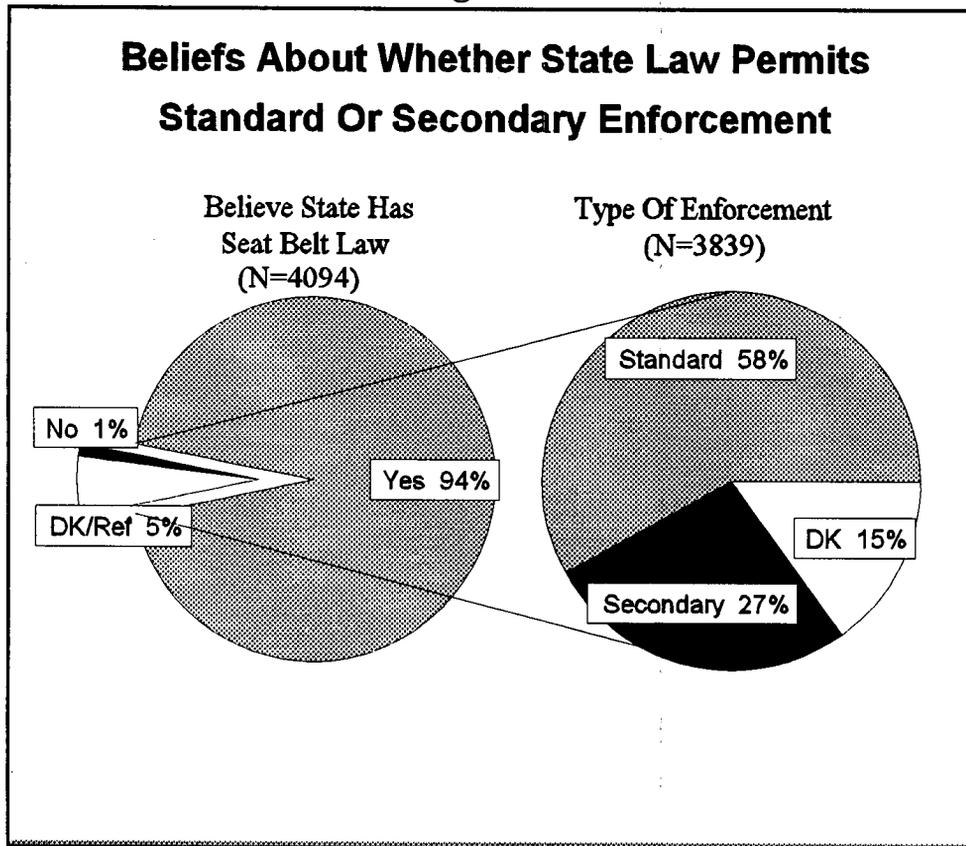
| Self-Reported Seat Belt Use For Different Seating Positions | What State Law Actually Requires | |
|---|--|--|
| | Driver and All Passengers To Wear Seat Belts | Only Driver And Front Seat Passengers To Wear Seat Belts |
| Seat Belt Use As Driver | (Drivers Only/N=839) | (Drivers Only/N=2838) |
| All Of The Time | 82% | 78% |
| Most Of The Time | 10% | 13% |
| Some Of The Time | 3% | 5% |
| Rarely | 3% | 2% |
| Never | 3% | 3% |
| Seat Belt Use In Front Seat | (N=895) | (N=2921) |
| All Of The Time | 79% | 73% |
| Most Of The Time | 11% | 14% |
| Some Of The Time | 4% | 7% |
| Rarely | 2% | 3% |
| Never | 4% | 4% |
| Seat Belt Use In Back Seat | (N=895) | (N=2921) |
| All Of The Time | 58% | 38% |
| Most Of The Time | 12% | 12% |
| Some Of The Time | 8% | 12% |
| Rarely | 6% | 10% |
| Never | 9% | 19% |
| Never Ride In Back | 6% | 7% |

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Standard or Secondary Enforcement Provisions Of Seat Belt Laws

State seat belt laws contain either standard or secondary enforcement provisions. Under standard enforcement, law enforcement officers can stop a vehicle on the basis of observing a seat belt violation. Under secondary enforcement an officer must observe some other violation first before stopping a vehicle. At the time of the survey 14 States plus the District of Columbia had standard enforcement provisions; 35 State laws required secondary enforcement. Among persons who thought their State had a law, 58% believed it permitted standard enforcement. This equates to 55% of the total population age 16 and older (58% of the 94% who believed there was a State law).

Figure 78



Qx: Does (STATE) have a law requiring seat belt use?

Qx: According to your state law, can police stop a vehicle if they observe a seat belt violation or do they have to observe some other offense first in order to stop the vehicle?

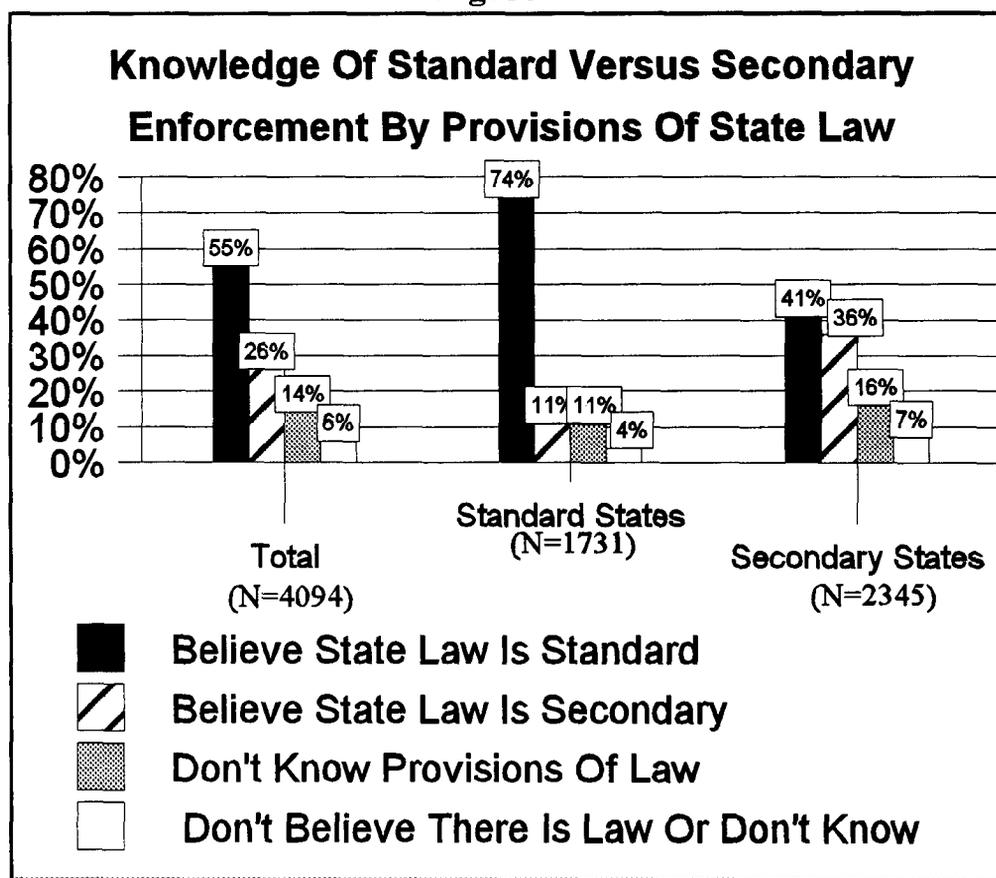
Base: Total population age 16+

Unweighted N's listed above.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Among persons living in States having seat belt laws with standard enforcement provisions, almost three-quarters (74%) reported that police could stop vehicles on the basis of observing seat belt violations (this figure is based on the total population; not just those who thought there was a law). In States having secondary enforcement provisions, there actually were more persons who incorrectly believed that police could stop a vehicle based on observing a seat belt violation (41%) than those who correctly knew that some other violation must be the basis for stopping the vehicle (36%).

Figure 79



Qx: According to your state law, can police stop a vehicle if they observe a seat belt violation or do they have to observe some other offense first in order to stop the vehicle?

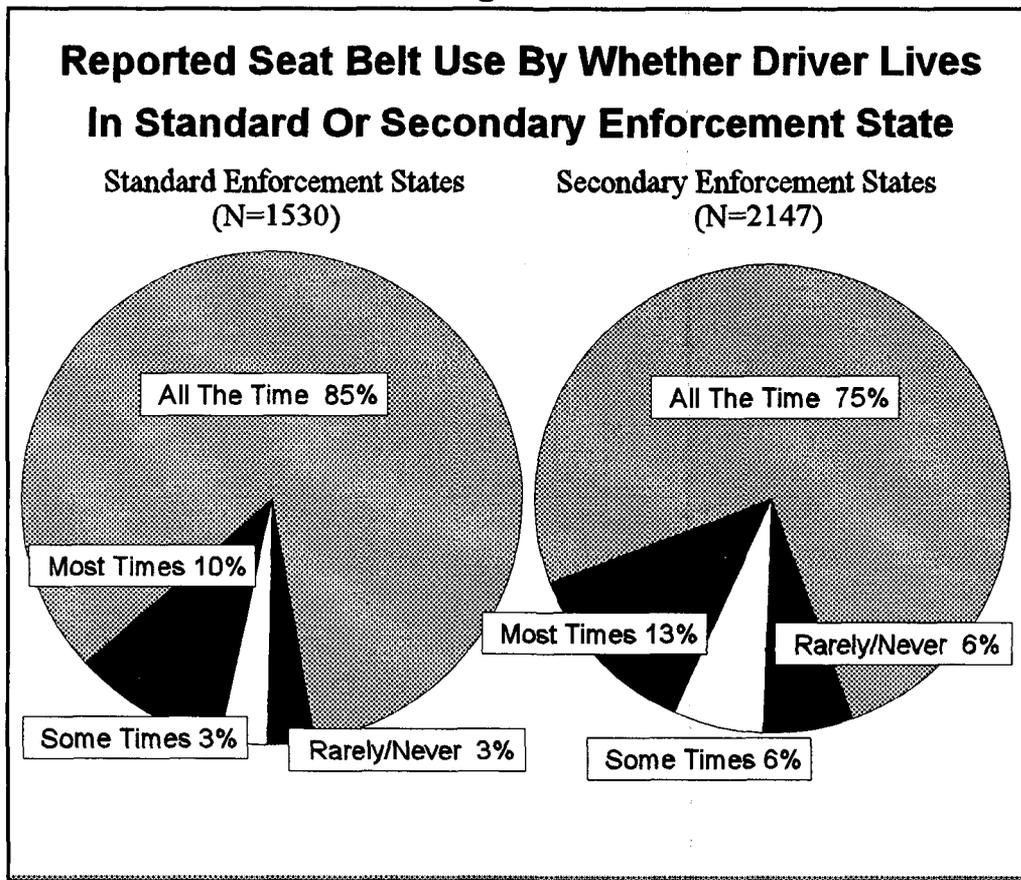
Base: Total population age 16+

Unweighted N's listed above.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Drivers in States having standard enforcement provisions reported more frequent seat belt use than did those in secondary enforcement States. In States where law enforcement officers could stop motor vehicles on the basis of observing seat belt violations, 85% of drivers said that they wore seat belts "all of the time" while driving. The comparable figure for drivers in secondary enforcement States was 75%.

Figure 80



Qx: When driving this (car/truck/van) how often do you wear your (shoulder/lap) belt?

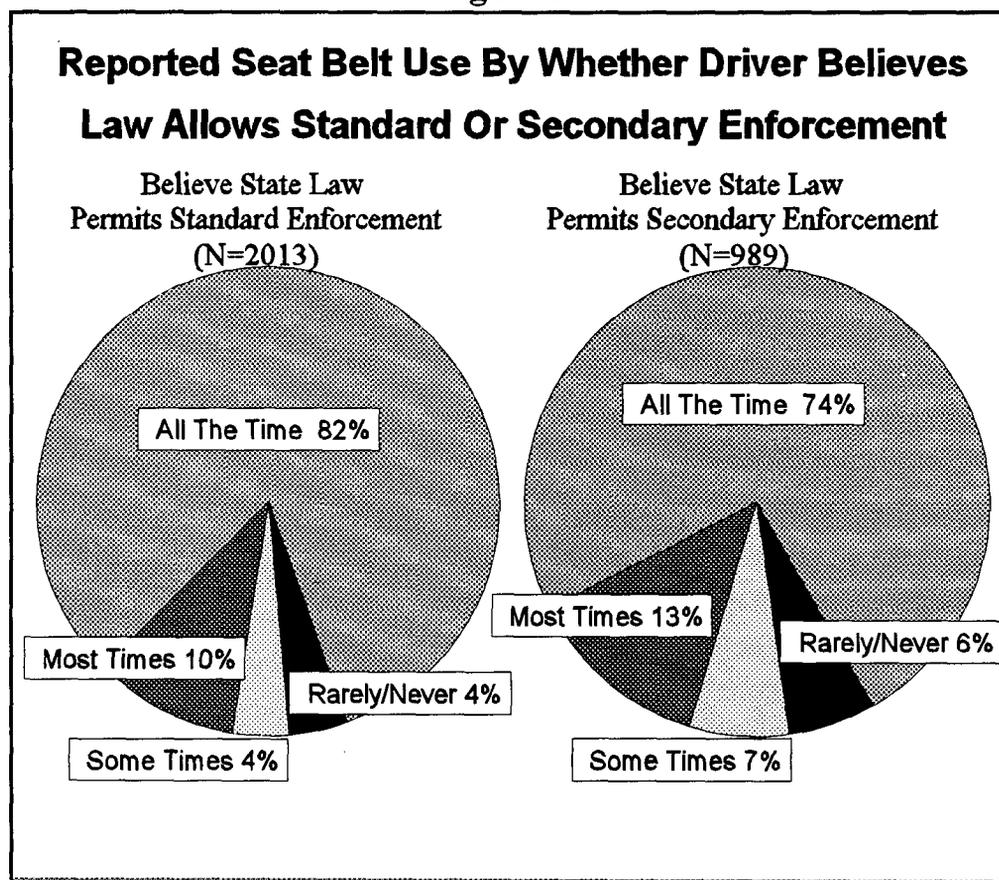
Base: Drivers whose primary vehicle has seat belts.

Unweighted N's listed above.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

The previous page looked at differences in seat belt use based on whether the State law called for standard or secondary enforcement. Presented below is drivers' reported seat belt usage separated according to their beliefs about the provisions of the State law. The results were similar to the previous analysis. If drivers thought that their State law permitted standard enforcement, then they were more likely to answer that they wore their seat belt "all of the time" (82%) compared to drivers who did not think their State allowed this (74%).

Figure 81



Qx: When driving this (car/truck/van) how often do you wear your (shoulder/lap) belt?

Qx: According to your state law, can police stop a vehicle if they observe a seat belt violation or do they have to observe some other offense first in order to stop the vehicle?

Base: Drivers whose primary vehicle has seat belts, who believe their State has a seat belt law, and who responded as to whether it had standard or secondary enforcement provisions.

Unweighted N's listed above.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

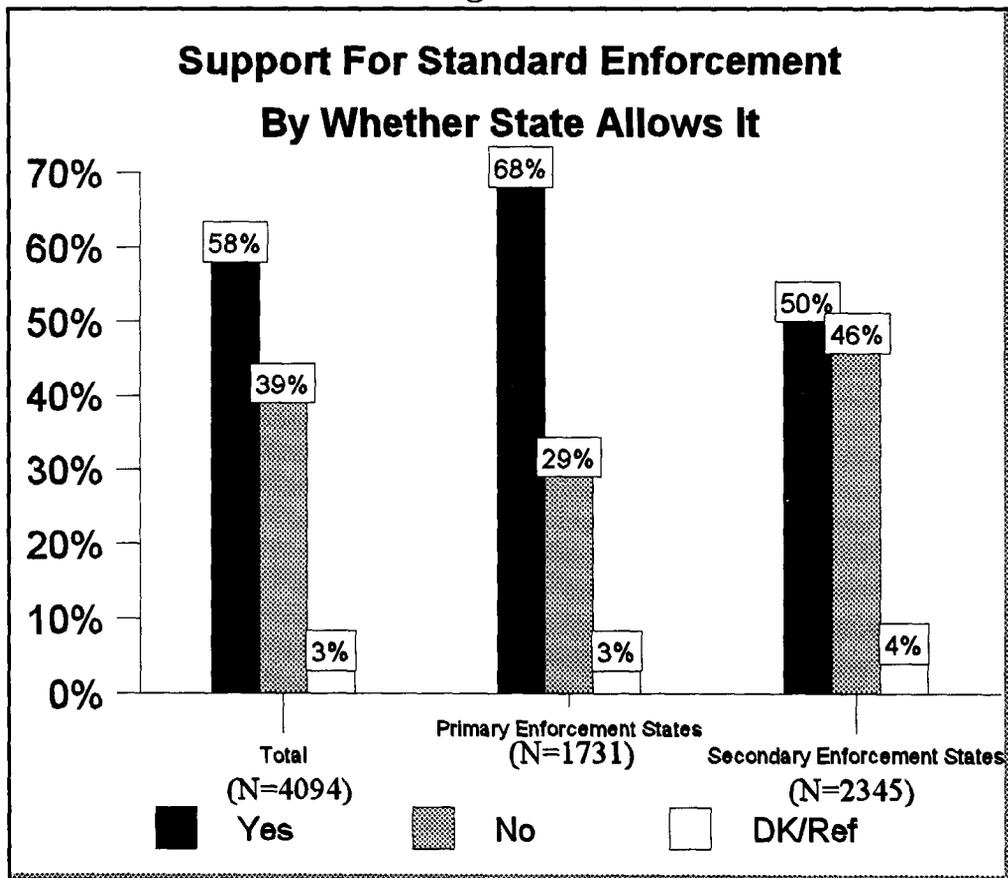
While reported seat belt usage was higher in standard enforcement States, there did not appear to be major differences between standard and secondary enforcement States in the perceived utility of seat belts. Table 37 compares the two groups of States on several belt utility items, as well as other attitudes. Comparison of those attitudes directly associated with enforcement are addressed later in this Chapter. Of the items listed below, the largest difference between standard and secondary enforcement States was only 5 percentage points.

| TABLE 37 | | |
|--|-------------------------|-----------|
| Attitudes Concerning Utility Of Seat Belts By Whether State Seat Belt Law Permits Standard Or Secondary Enforcement | | |
| | Provisions Of State Law | |
| | Standard | Secondary |
| | (N=1731) | (N=2345) |
| Strongly or Somewhat Agree With Statement: | | |
| Seat belts are just as likely to harm you as help you. | 38% | 39% |
| An accident close to home is usually not as serious as an accident farther away. | 14% | 12% |
| If I were in an accident, I would want to have my seat belt on. | 94% | 93% |
| I would feel self-conscious around my friends if I wore a seat belt and they did not. | 21% | 16% |
| Medical insurance costs would be lower if more people wore seat belts. | 70% | 66% |
| Putting on a seat belt makes me worry more about being in an accident. | 16% | 15% |
| Agree With Statement: | | |
| If it is your time to die, you'll die, so it doesn't matter whether you wear your seat belt? | 27% | 28% |
| People have a choice to do what they can to avoid death and serious injury, so wearing a seat belt does matter? | 89% | 88% |

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Besides exploring respondents' awareness of the enforcement provisions of their State law, the survey collected data on whether or not respondents supported standard enforcement. Almost six-in-ten (58%) agreed that police should be allowed to stop a vehicle if they observed a seat belt violation when no other traffic laws were being broken. The figure was higher (68%) in States currently permitting standard enforcement of seat belt laws. Yet even in States with secondary enforcement provisions, half of the public (50%) supported standard enforcement while another 4% were unsure.

Figure 82



Qx: In your opinion, should police be allowed to stop a vehicle if they observe a seat belt violation when no other traffic laws are being broken?

Base: Total population age 16+

Unweighted N's listed above.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Support for standard enforcement provisions was greater among females (63%) than males (52%), greater among blacks (61%) than whites (56%), and greater among Hispanics (73%) than non-Hispanics (56%). Persons age 21 through 24 showed the least support (49%) compared to any other age range listed below.

TABLE 38
Support For Standard Enforcement By
Sex, Age, Race, And Ethnicity

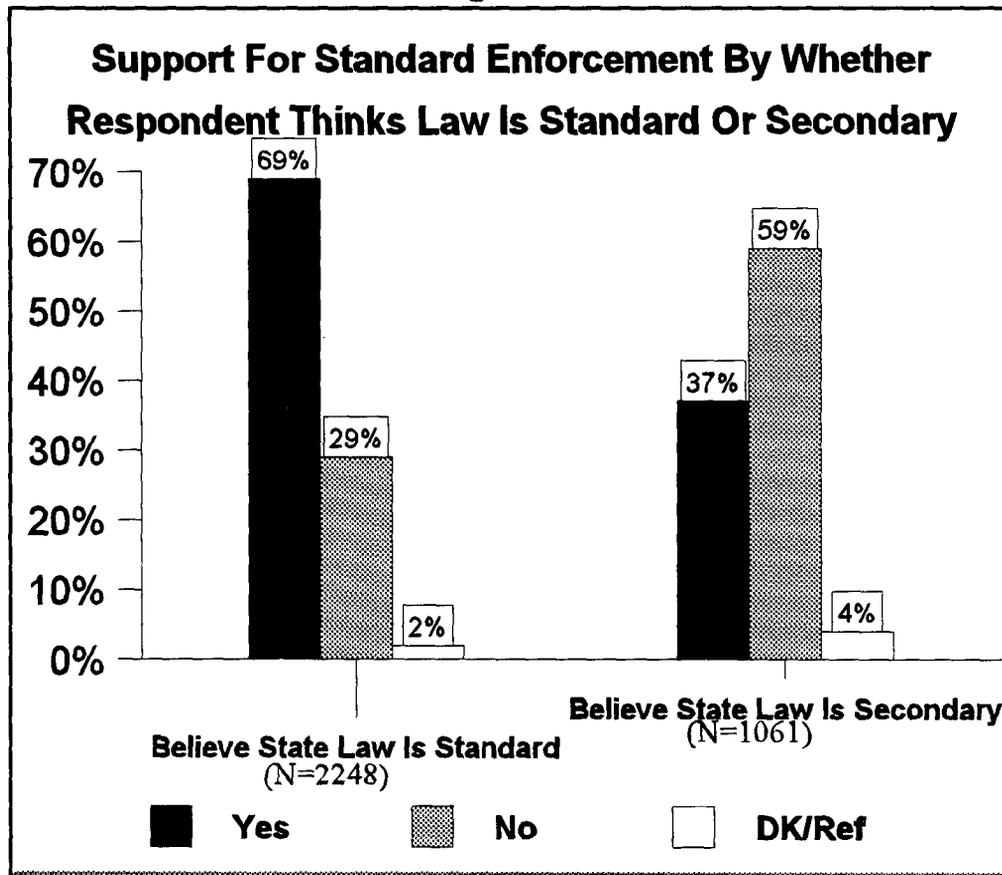
Qx: In your opinion, should police be allowed to stop a vehicle if they observe a seat belt violation when no other traffic laws are being broken?

| | Yes | No | DK/Ref | N-Size |
|--------------|-----|-----|--------|--------|
| Total | 58% | 39% | 3% | (4094) |
| Sex | | | | |
| Female | 63% | 33% | 5% | (2185) |
| Male | 52% | 46% | 2% | (1909) |
| Age | | | | |
| 16-20 | 56% | 44% | 1% | (398) |
| 21-24 | 49% | 49% | 2% | (302) |
| 25-34 | 55% | 43% | 2% | (1066) |
| 35-44 | 58% | 38% | 3% | (931) |
| 45-54 | 58% | 39% | 3% | (542) |
| 55-64 | 59% | 39% | 2% | (330) |
| 65+ | 64% | 29% | 7% | (479) |
| Race | | | | |
| Black | 61% | 36% | 4% | (427) |
| White | 56% | 41% | 3% | (3058) |
| Ethnicity | | | | |
| Hispanic | 73% | 25% | 2% | (406) |
| Non-Hispanic | 56% | 41% | 3% | (3652) |

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

In general, people's beliefs and attitudes about enforcement provisions tended to agree. Among persons who believed their State seat belt law permitted standard enforcement, 69% agreed that police should be able to stop the vehicle if they observe a seat belt violation but no other infraction. But if they believed their State law only allowed secondary enforcement, then the majority (59%) supported secondary enforcement provisions.

Figure 83



Qx: According to your state law, can police stop a vehicle if they observe a seat belt violation or do they have to observe some other offense first in order to stop the vehicle?

Qx: In your opinion, should police be allowed to stop a vehicle if they observe a seat belt violation when no other traffic laws are being broken?

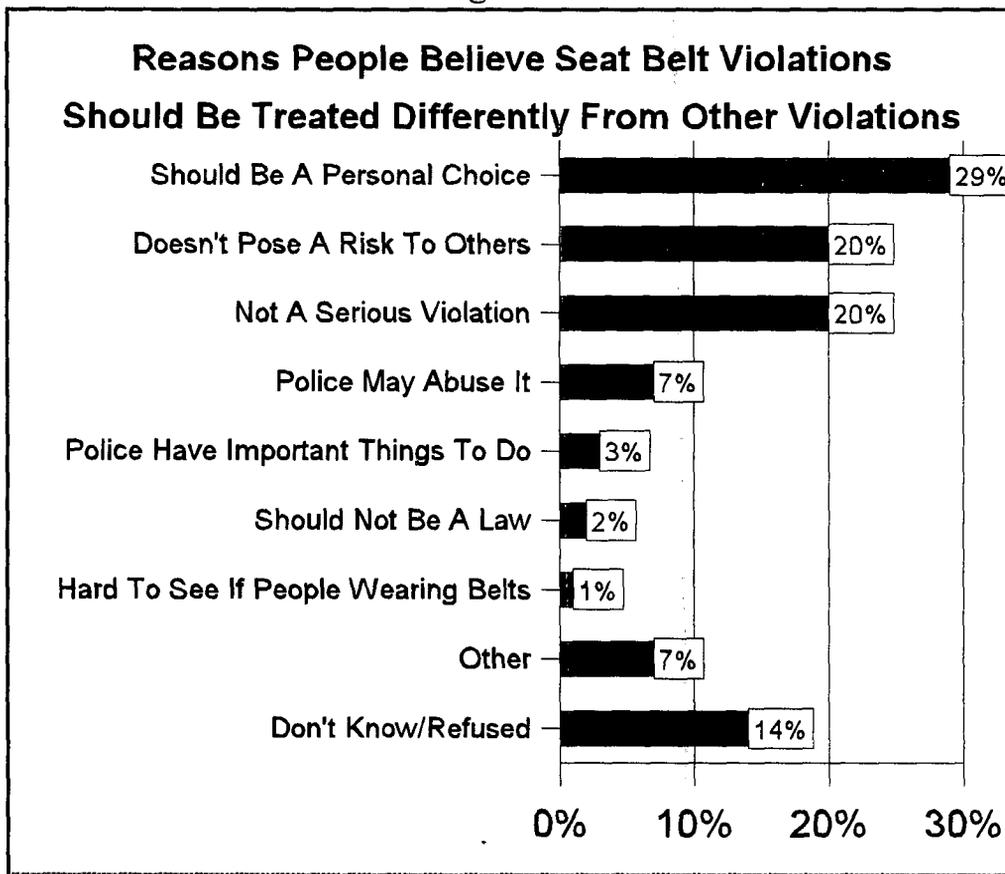
Base: Believe their State has a seat belt law, and identified it as having standard or secondary enforcement provisions.

Unweighted N's listed above.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

If a respondent said that police should not be allowed to stop a vehicle based on observing a seat belt violation (or said s/he did not know if police should be allowed to do this), the interviewer stated that “most other traffic laws allow police to stop the vehicle whenever they see a violation.” The interviewer then asked why the respondent thought seat belt violations should be treated differently from other violations. The most frequently mentioned reason was that wearing seat belts should be a personal choice (29%). One-in-five (20%) answered that noncompliance did not pose a threat to others; an identical percentage (20%) responded that it was not a serious violation.

Figure 84



Qx: Most other traffic laws allow police to stop the vehicle whenever they see a violation. Why do you think seat belt violations should be treated differently from other traffic violations?

Base: Those who think that police should not be allowed to stop a vehicle for a seat belt violation, or said they did not know.

Unweighted N=176

Stopped For Traffic-Related Reason In Past Year

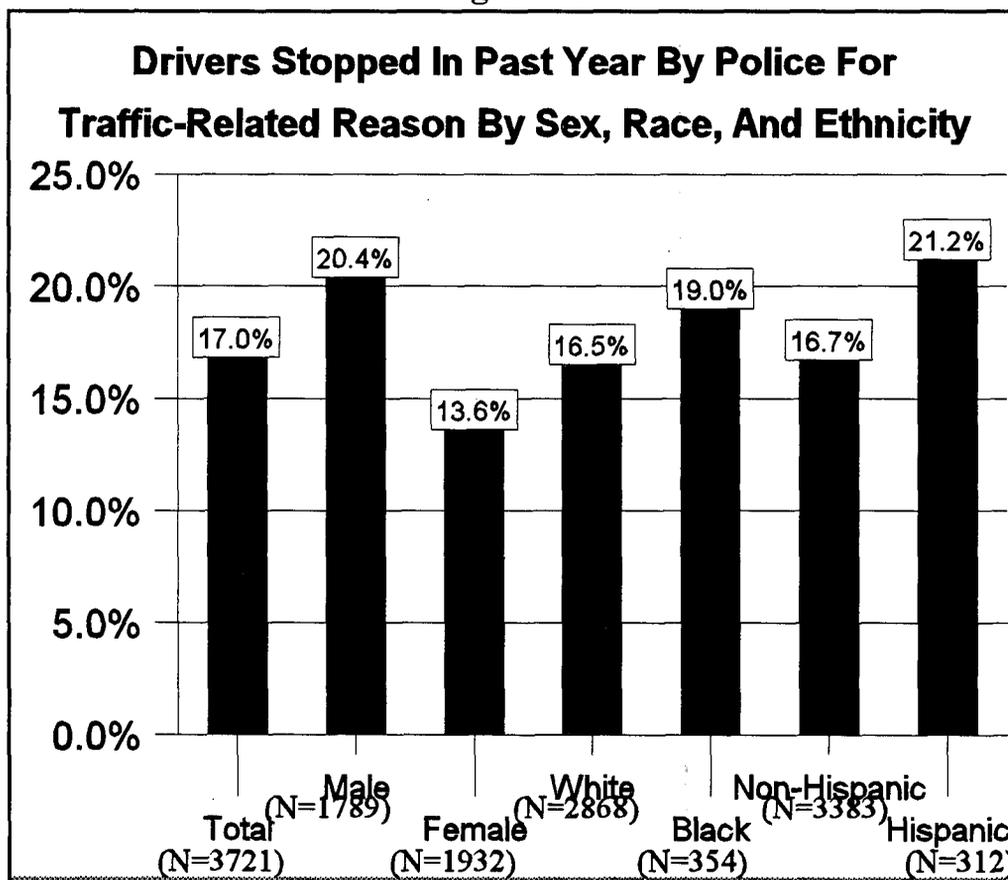
The number of States having seat belt laws that contain standard enforcement provisions has risen in recent years. However, most States at this time continue to require secondary enforcement (see Appendix B for listing of enforcement provisions of State laws at the time of the survey). One of the major objections raised in efforts to convert from secondary to standard enforcement has been the concern expressed by some groups that an upgraded law would be differentially enforced against them.

This survey examined whether certain groups are subjected to traffic stops at different rates by law enforcement officers. Interviewers asked drivers if they had been stopped by police in the past twelve months for any traffic-related reason while driving. If they had been stopped, the interviewers asked the respondents if they were wearing a seat belt at the time of the stop. Lastly, the interviewers questioned the respondents about the outcome of the stop. Specifically, the interviewers asked the respondents if they received a ticket for a traffic violation.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

About one-in-six drivers (17.0%) said they had been stopped by police for a traffic-related reason in the past year. Males (20.4%) were more likely to indicate this than were females (13.6%). A higher percentage of blacks (19.0%) than whites (16.5%) reported that they had been stopped, as did a higher percentage of Hispanics (21.2%) than non-Hispanics (16.7%). However, the numbers of black and Hispanic drivers in the study were too few for these differences to be statistically significant.

Figure 85



Qx: In the past twelve months, since (MONTH) of last year, have you been stopped by police for any traffic-related reason while driving?

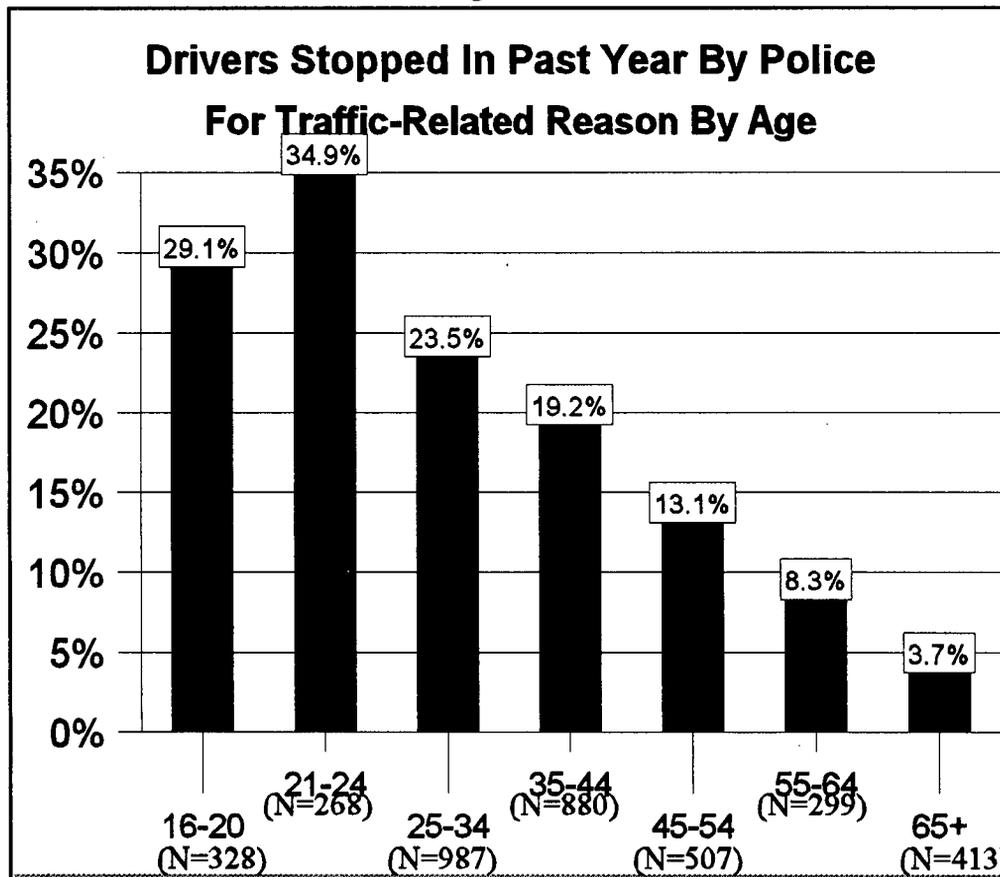
Base: Drivers whose primary vehicle has seat belts.

Unweighted N's listed above.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Greater differences occurred when segmenting the sample of drivers by age group. Almost three-in-ten drivers ages 16-20 (29.1%) said they had been stopped by police in the past year for a traffic-related reason, as did more than one-third (34.9%) of drivers ages 21-24. The figure then declined to 23.5% of drivers ages 25-34, 19.2% of drivers ages 35-44, 13.1% of drivers ages 45-54, 8.3% of drivers ages 55-64, and 3.7% of drivers age 65 and older. Readers are cautioned that the sample size for some of the age ranges is relatively small.

Figure 86



Qx: In the past twelve months, since (MONTH) of last year, have you been stopped by police for any traffic-related reason while driving?

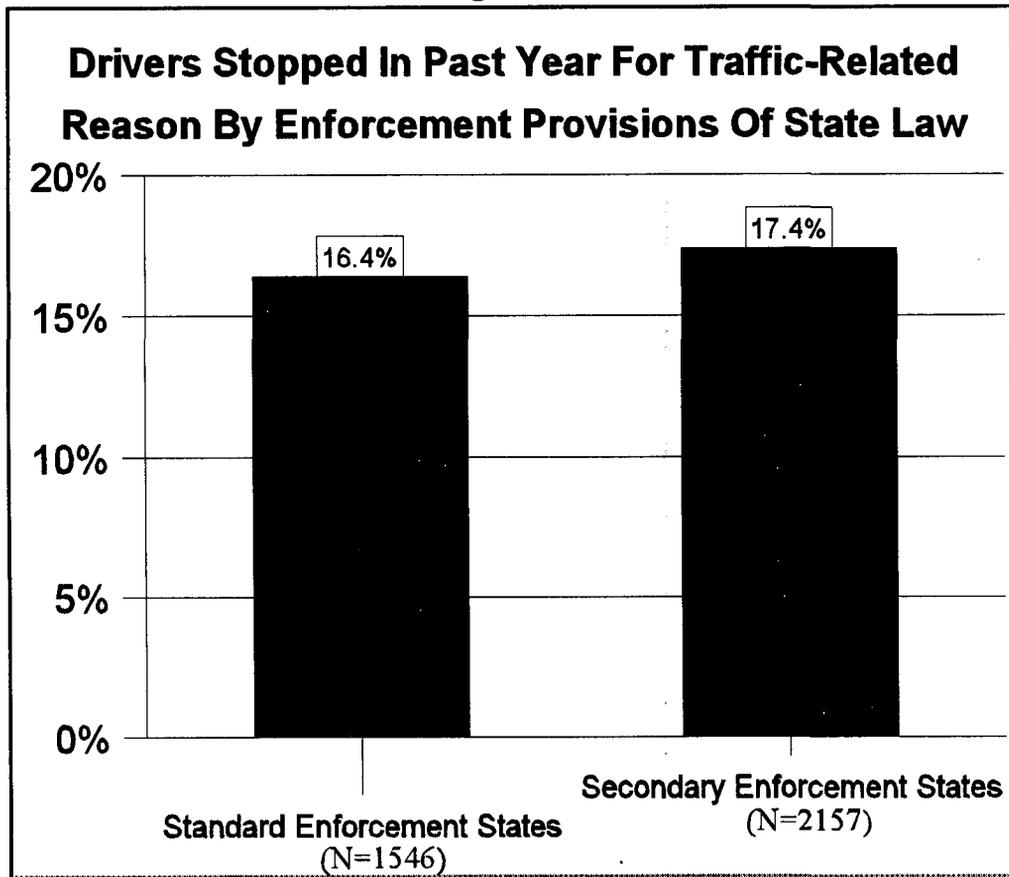
Base: Drivers whose primary vehicle has seat belts.

Unweighted N's listed above.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

There was no appreciable difference between States with standard and secondary enforcement seat belt laws in the percentage of drivers who had been stopped by police in the past twelve months for traffic-related reasons. The recorded percentage of stopped drivers was actually higher in the secondary enforcement States (17.4%) than the standard enforcement States (16.4%), although not a statistically significant difference.

Figure 87



Qx: In the past twelve months, since (MONTH) of last year, have you been stopped by police for any traffic-related reason while driving?

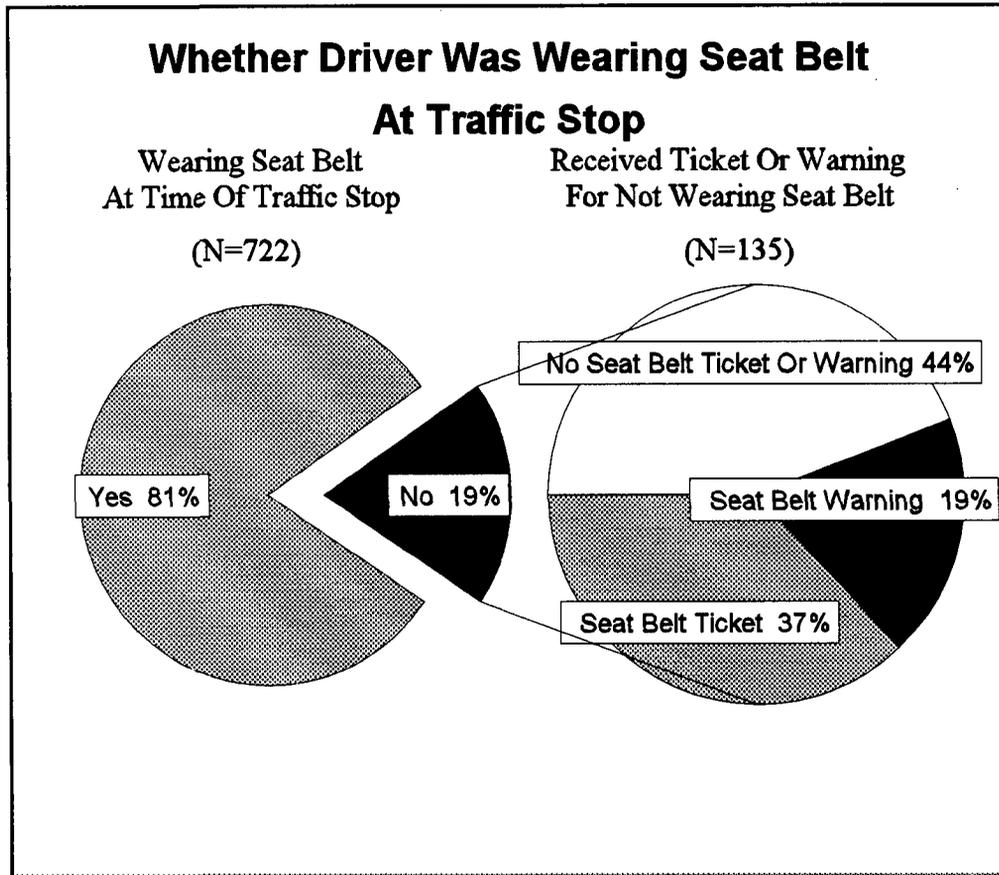
Base: Drivers whose primary vehicle has seat belts.

Unweighted N's listed above.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Of those persons who said that they had been stopped by police in the past year for a traffic-related reason while driving, the vast majority (81%) answered that they were wearing a seat belt at the time. If they were not wearing a seat belt, they usually received a ticket (37%) or warning (19%) for violating seat belt laws.

Figure 88



Qx: Were you wearing a seat belt when you were stopped? (IF STOPPED MORE THAN ONCE IN PAST 12 MONTHS, ASK ABOUT MOST RECENT TIME)

Qx: Did you receive a ticket for violating seat belt laws?

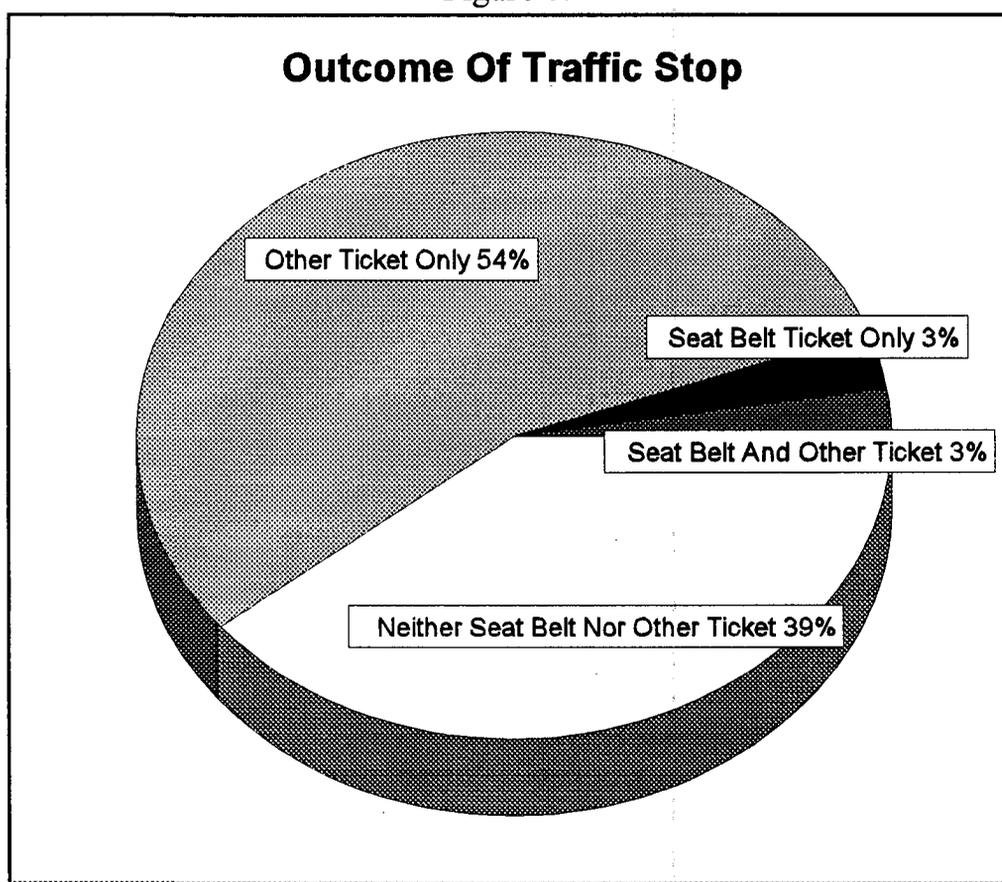
Qx: Did you receive a warning for violating seat belt laws?

Base: Stopped by police in past 12 months for a traffic-related reason while driving. Unweighted N's listed above.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Among all drivers who were stopped for a traffic-related reason, 60% received a ticket for some type of traffic violation. Most often, they did not get a ticket for a seat belt violation (understandable since most were wearing their seat belts) but received a ticket for something else (54%). In a few cases (3%), they received both a seat belt ticket and a ticket for some other traffic violation. The same percentage (3%) were given a seat belt ticket but no other citation. Almost four-in-ten (39%) reported that they did not receive any type of ticket.

Figure 89



Qx: *In the past twelve months, since (MONTH) of last year, have you been stopped by police for any traffic-related reason while driving?*

Qx: *Did you receive a ticket for violating seat belt laws?*

Qx: *Did you receive a ticket for some other traffic violation?*

Qx: *Did you receive a ticket for any traffic violation?*

Base: *Stopped by police in past 12 months for a traffic-related reason while driving.*

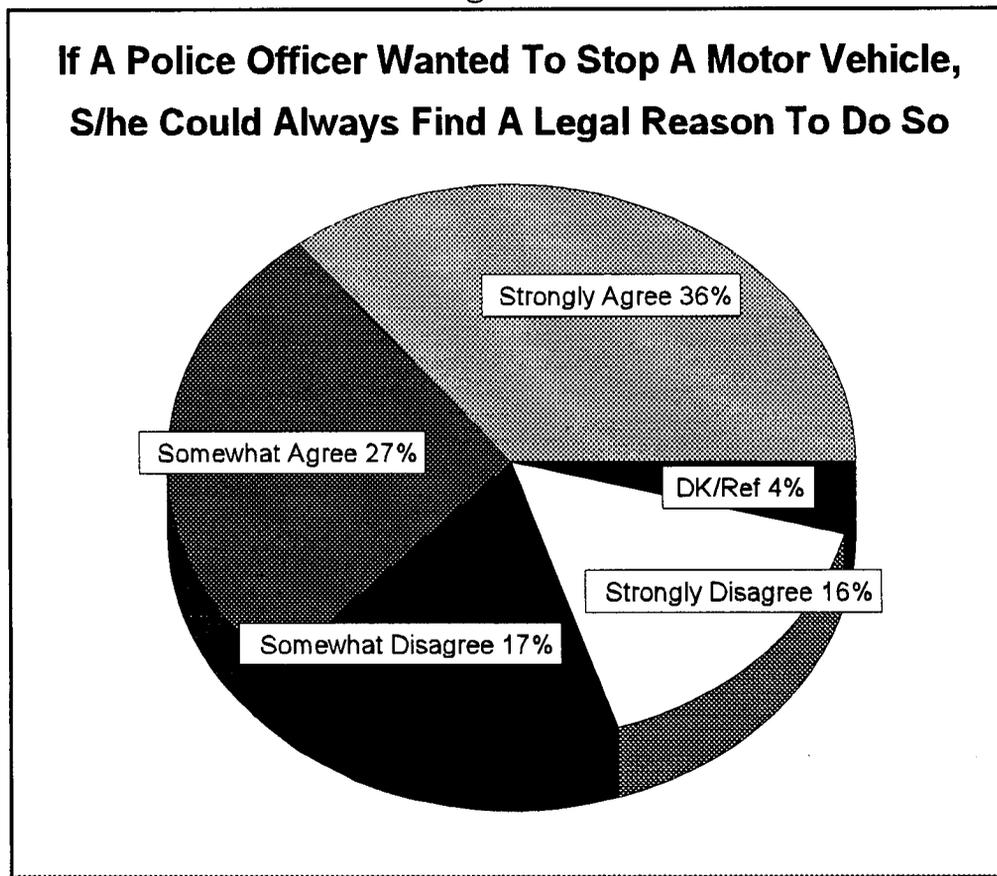
Unweighted N=722

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Beliefs About Power Of Law Enforcement To Stop Vehicles

While some persons have expressed concerns that standard enforcement provisions for seat belt laws may be inappropriately used by law enforcement to stop vehicles, there is a question as to whether the public believes that a standard enforcement seat belt law would make any difference in the power of law enforcement to stop motor vehicles. To examine that question, respondents were asked their level of agreement with the statement "If a police officer wanted to stop a motor vehicle, that officer could always find a legal reason to stop it." Slightly more than three-in-five persons (63%) agreed with the statement while 33% disagreed.

Figure 90



Qx: Now I'm going to read you a few statements. Please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree. "If a police officer wanted to stop a motor vehicle, that officer could always find a legal reason to stop it."

Base: Total population age 16+

Unweighted N=4094

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Blacks (40%), Hispanics (43%), and males (42%) were more likely than whites (34%), non-Hispanics (35%), and females (30%) to strongly agree with the statement. The youngest age group (28%) was least likely of the groups listed to express strong agreement with the statement.

TABLE 39
“If A Police Officer Wanted To Stop A Motor Vehicle.
That Officer Could Always Find A Legal Reason To Stop It”
By Sex, Age, Race, And Ethnicity

Qx: Now I'm going to read you a few statements. Please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree. “If a police officer wanted to stop a motor vehicle, that officer could always find a legal reason to stop it.”

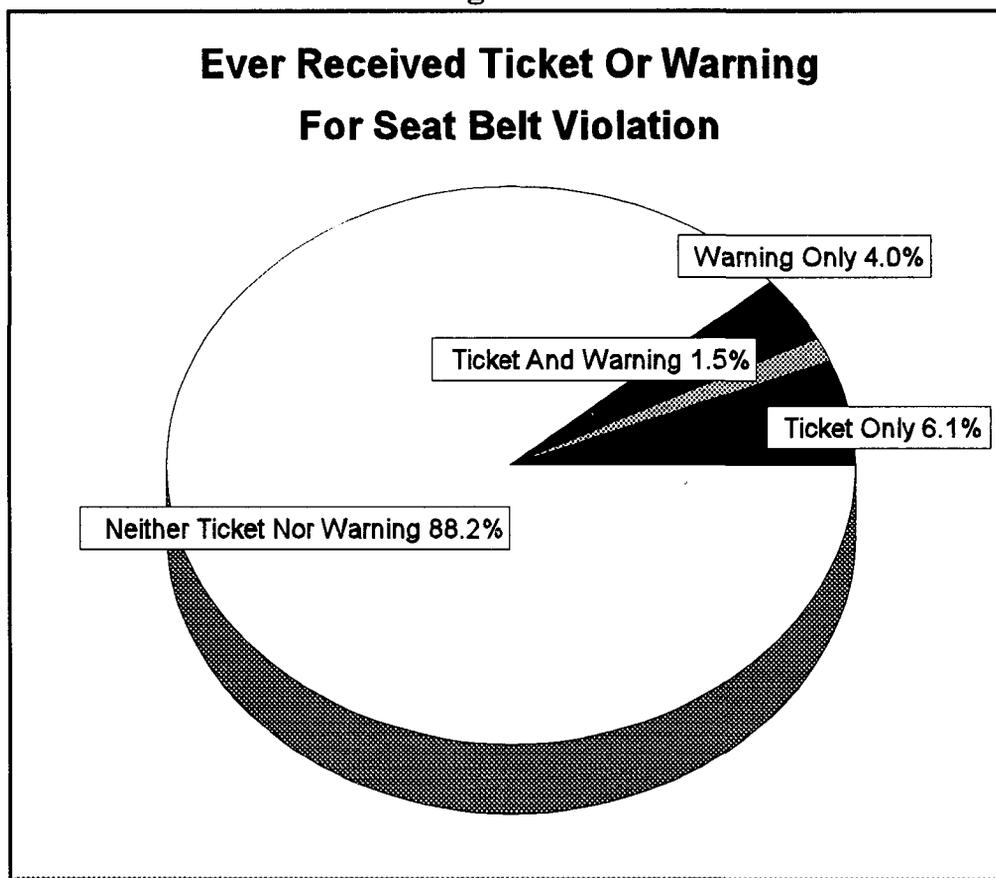
| | Strongly Agree | Somewhat Agree | Somewhat Disagree | Strongly Disagree | DK/Ref | N-Size |
|--------------------------------|----------------|----------------|-------------------|-------------------|--------|--------|
| Total | 36% | 27% | 17% | 16% | 4% | (4094) |
| Sex | | | | | | |
| Female | 30% | 29% | 19% | 17% | 5% | (2185) |
| Male | 42% | 25% | 15% | 16% | 3% | (1909) |
| Age | | | | | | |
| 16-20 | 28% | 36% | 20% | 16% | 1% | (398) |
| 21-24 | 35% | 36% | 15% | 13% | 2% | (302) |
| 25-34 | 38% | 27% | 18% | 16% | 2% | (1066) |
| 35-44 | 35% | 27% | 18% | 17% | 3% | (931) |
| 45-54 | 36% | 23% | 21% | 17% | 4% | (542) |
| 55-64 | 44% | 24% | 12% | 17% | 3% | (330) |
| 65+ | 34% | 26% | 14% | 16% | 10% | (479) |
| Race | | | | | | |
| Black | 40% | 24% | 14% | 17% | 5% | (427) |
| White | 34% | 27% | 18% | 17% | 4% | (3058) |
| Ethnicity | | | | | | |
| Hispanic | 43% | 26% | 15% | 12% | 3% | (406) |
| Non-Hispanic | 35% | 27% | 17% | 17% | 4% | (3652) |
| Stopped In Past Year By Police | 40% | 29% | 17% | 13% | 1% | (722) |

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Ever Received Ticket Or Warning For Seat Belt Violation

Almost 12% (11.6%) of the population age 16 and older have received a ticket and/or warning for violating the seat belt laws. Specifically, 6.1% have received a ticket only, 1.5% have received both a ticket and a warning, and 4.0% have received only a warning. A fraction over 88% (88.2%) percent have received neither a ticket nor warning, while less than 1% (0.2%) were unsure or refused to respond.

Figure 91



Qx: Did you receive a ticket for violating seat belt laws?

Qx: Did you receive a warning for violating seat belt laws?

Qx: Have you ever received a ticket for not wearing seat belts?

Qx: Have you ever received a warning for not wearing seat belts?

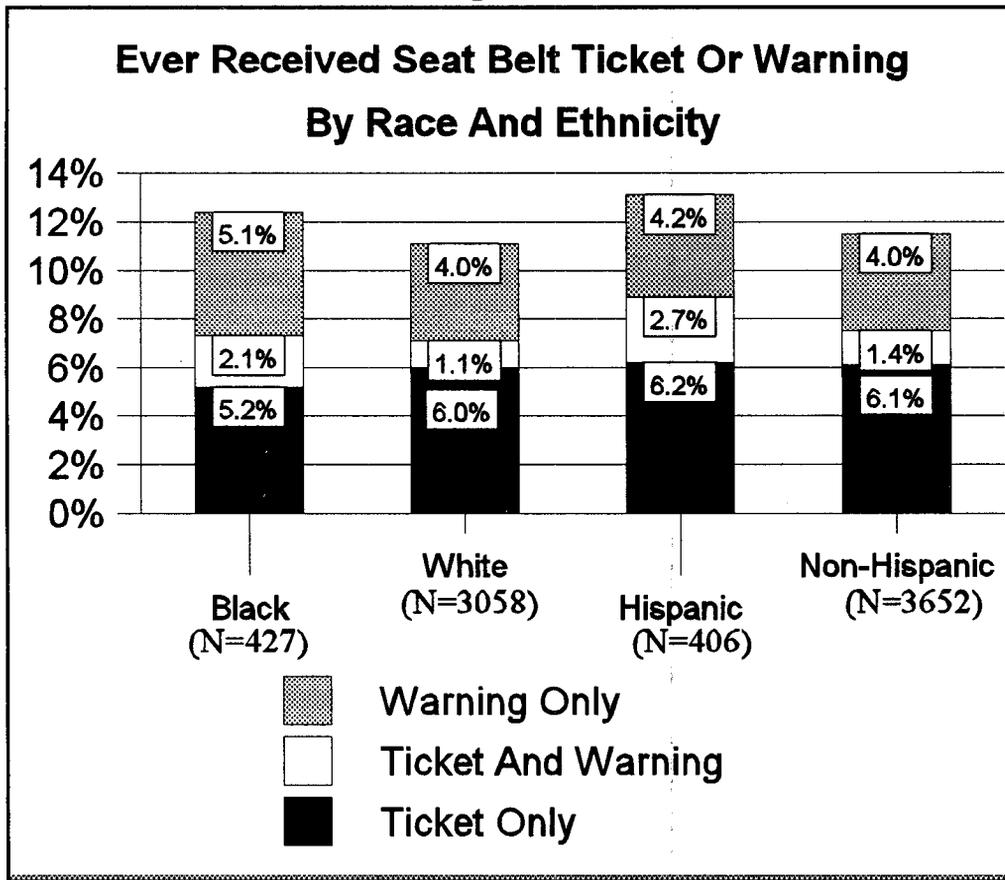
Base: Total population age 16+

Unweighted N=4094

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Overall, 11.6% of the population age 16 and older had received a ticket and/or warning at some time in the past for a seat belt violation. The figure was 12.4% for blacks, 11.1% for whites, 13.1% for Hispanics, and 11.5% for non-Hispanics. Specifically regarding tickets (either ticket only or ticket and warning), 7.3% of blacks, 7.1% of whites, 8.9% of Hispanics, and 7.5% of non-Hispanics had received seat belt citations.

Figure 92



Qx: Did you receive a ticket for violating seat belt laws?

Qx: Did you receive a warning for violating seat belt laws?

Qx: Have you ever received a ticket for not wearing seat belts?

Qx: Have you ever received a warning for not wearing seat belts?

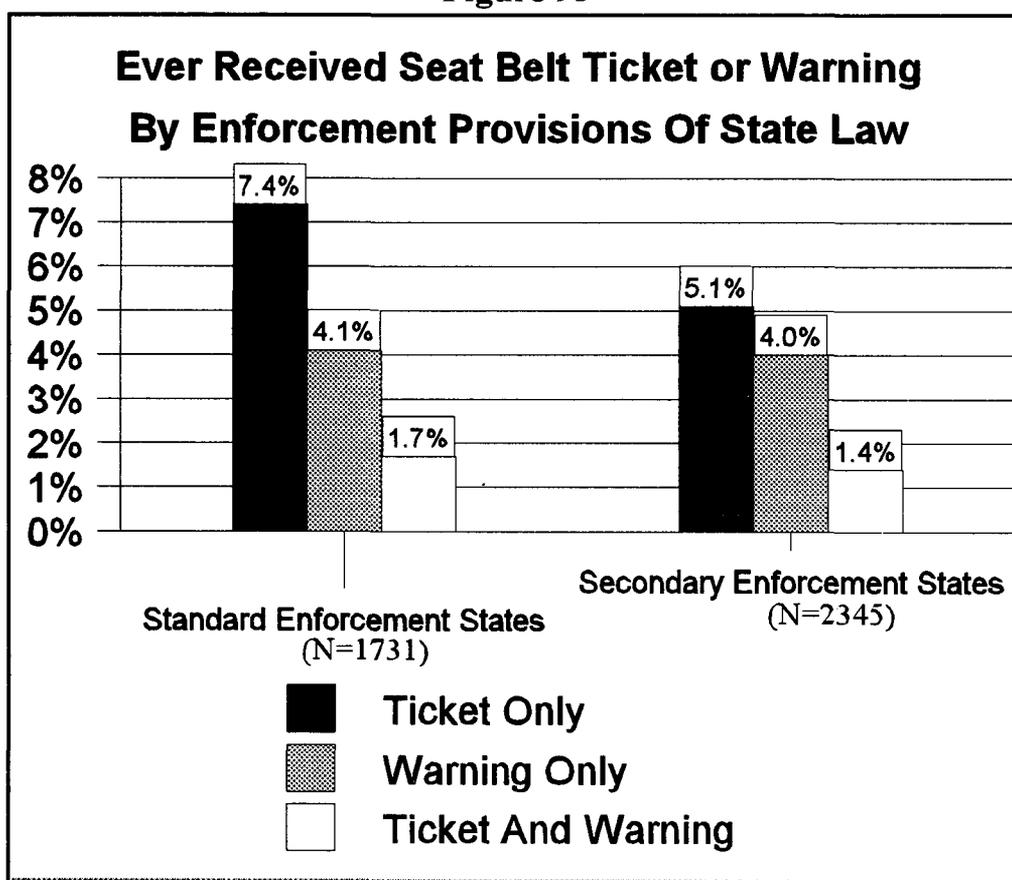
Base: Total population age 16+

Unweighted N=4094

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

In States having seat belt laws with standard enforcement provisions, 13.3% of the population age 16 and older had received a ticket and/or warning for a seat belt violation. In secondary enforcement States, 10.5% had received a ticket and/or warning. The difference was almost entirely due to more persons in standard enforcement States reporting that they had been ticketed.

Figure 93



Qx: Did you receive a ticket for violating seat belt laws?

Qx: Did you receive a warning for violating seat belt laws?

Qx: Have you ever received a ticket for not wearing seat belts?

Qx: Have you ever received a warning for not wearing seat belts?

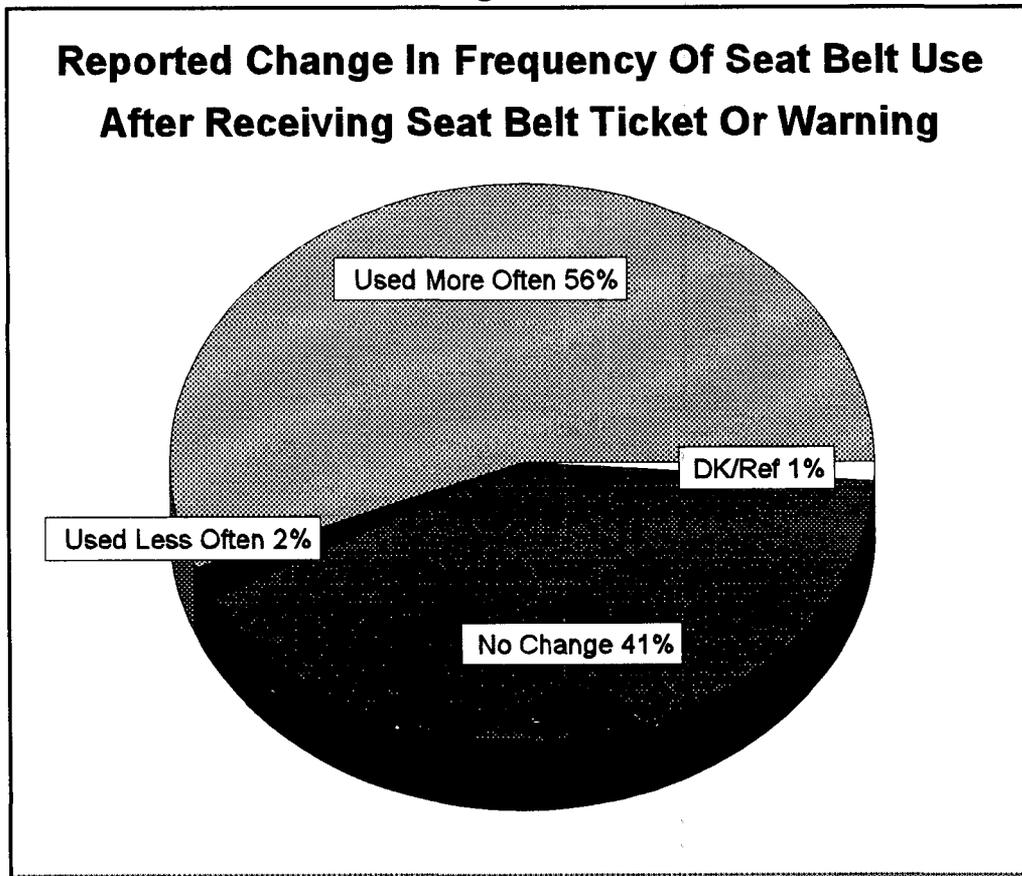
Base: Total population age 16+

Unweighted N=4094

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

When asked if their frequency of seat belt use had changed after they received the seat belt ticket or warning, most persons (56%) said that they started using their seat belt more often. A few (2%) reported using their seat belt less often while 41% indicated that there was no change.

Figure 94



Qx: After you received the seat belt (ticket/warning), did you start wearing your seat belts more often, less often, or was there no change in how often you wore them?

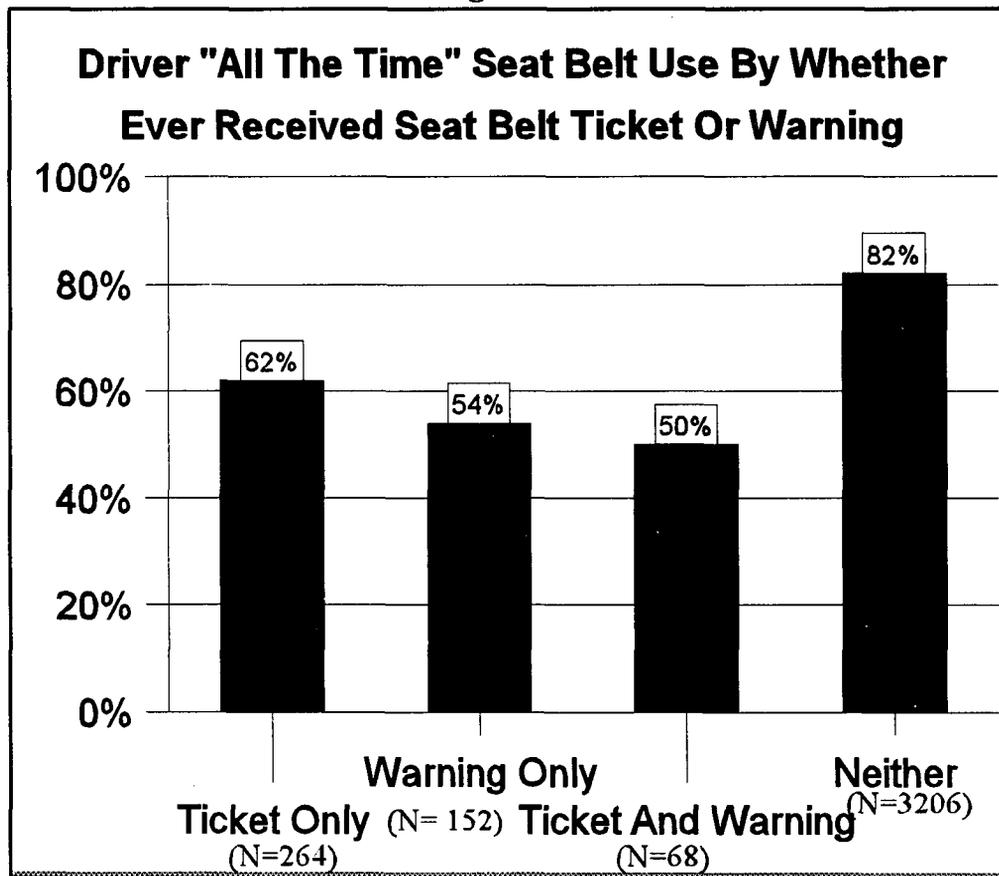
Base: Had received a ticket and/or warning for a seat belt violation at some time in the past.

Unweighted N=530

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Although most persons who had received a seat belt ticket or warning said that their use of seat belts increased afterwards, their reported level of current seat belt use still tended to be markedly lower than that of persons who had received neither a ticket nor warning. Among drivers, 62% of those who had received a ticket only, 54% of those who had received a warning only, and 50% of those who had received a ticket and warning said that they used their seat belt "all of the time" while driving. In contrast, 82% of drivers who had received neither a seat belt ticket nor warning reported wearing their seat belt "all of the time" while driving.

Figure 95



Qx: When driving this (car/truck/van) how often do you wear your (shoulder/lap) belt?

Qx: Did you receive a ticket for violating seat belt laws?

Qx: Did you receive a warning for violating seat belt laws?

Qx: Have you ever received a ticket for not wearing seat belts?

Qx: Have you ever received a warning for not wearing seat belts?

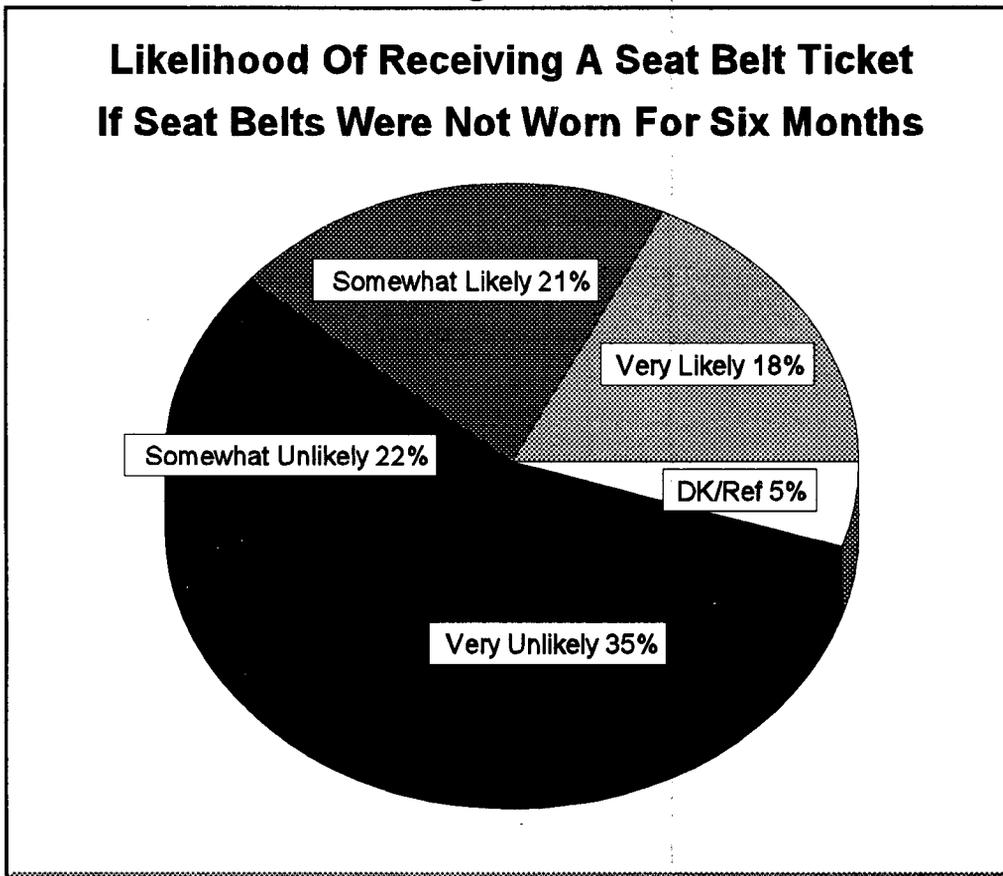
Base: Drivers whose primary vehicle has seat belts.

Unweighted N's listed above.

Perceived Risk Of Being Ticketed For Non-Use Of Seat Belts

Drivers were asked their likelihood of being ticketed if they did not wear a seat belt at all during the next six months while driving. A minority (39%) considered it likely; less than one-in-five (18%) considered it very likely. More than one-third of drivers (35%) thought they would be very unlikely to be ticketed. Readers are reminded that most non-use occurs among persons who use their seat belts at least on occasion (see Chapter 1). Thus the question wording took the most extreme form of non-use, and removed the option taken by many drivers of responding to their own assessments of risk.

Figure 96



Qx: Assume that you do not wear your seat belt AT ALL while driving over the next six months. How likely do you think you will be to receive a ticket for not wearing a seat belt?

Base: Drives a motor vehicle.

Unweighted N=3721

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Drivers who previously had received a seat belt ticket were more likely than other drivers to view themselves at-risk of being ticketed if they did not wear their seat belt. Among those drivers who had gotten a seat belt ticket (but no warning) at some time in the past, 50% answered that they were somewhat or very likely to be ticketed if they did not use seat belts at all over the next six months compared to 38% of drivers who had never received a ticket or warning. Most of that difference occurred in the very likely category.

The perceived risk was weaker if only warnings were received. There basically was no difference in the percentage who viewed a ticket as very likely between “warning only” and “no ticket or warning” respondents. Instead, the “warning only” group was more apt to consider a ticket to be somewhat likely than did the “no ticket or warning” group and less prone to consider a ticket very unlikely. Few respondents had received both a ticket and a warning, so the results are only suggestive. These respondents showed the greatest level of perceived risk of being ticketed.

TABLE 40
Perceived Risk Of Being Ticketed
By Whether Ever Received A Seat Belt Ticket Or Warning

Qx: Assume that you do not wear your seat belt AT ALL while driving over the next six months. How likely do you think you will be to receive a ticket for not wearing a seat belt?

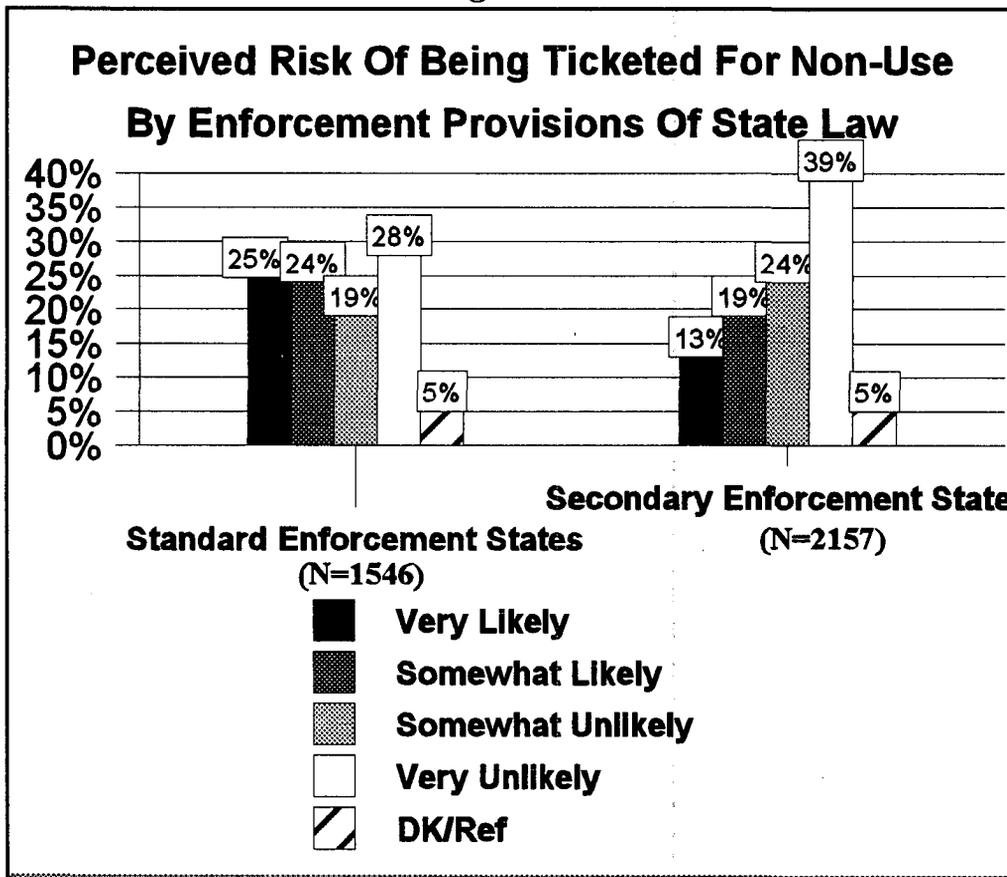
Base: Drives a motor vehicle.

| Perceived Risk Of Being Ticketed: | Ever Received Ticket Or Warning | | | |
|-----------------------------------|---------------------------------|--------------------|--------------|----------------------------|
| | Ticket Only | Ticket and Warning | Warning Only | Neither Ticket Nor Warning |
| | (N=269) | (N=68) | (N=153) | (N=3226) |
| Very Likely | 26% | 46% | 16% | 17% |
| Somewhat Likely | 23% | 12% | 32% | 21% |
| Somewhat Unlikely | 16% | 22% | 22% | 22% |
| Very Unlikely | 30% | 19% | 27% | 35% |
| DK/Ref | 4% | 2% | 3% | 5% |

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

The perceived risk of being ticketed differed substantially according to the enforcement provisions of the State law. In States permitting standard enforcement of seat belt laws, almost half (49%) of drivers said they were somewhat or very likely to be ticketed if they did not wear their seat belt at all while driving over the next six months. Only 33% in secondary enforcement States considered themselves to be somewhat or very likely to be ticketed.

Figure 97



Qx: Assume that you do not wear your seat belt AT ALL while driving over the next six months. How likely do you think you will be able to receive a ticket for not wearing a seat belt?

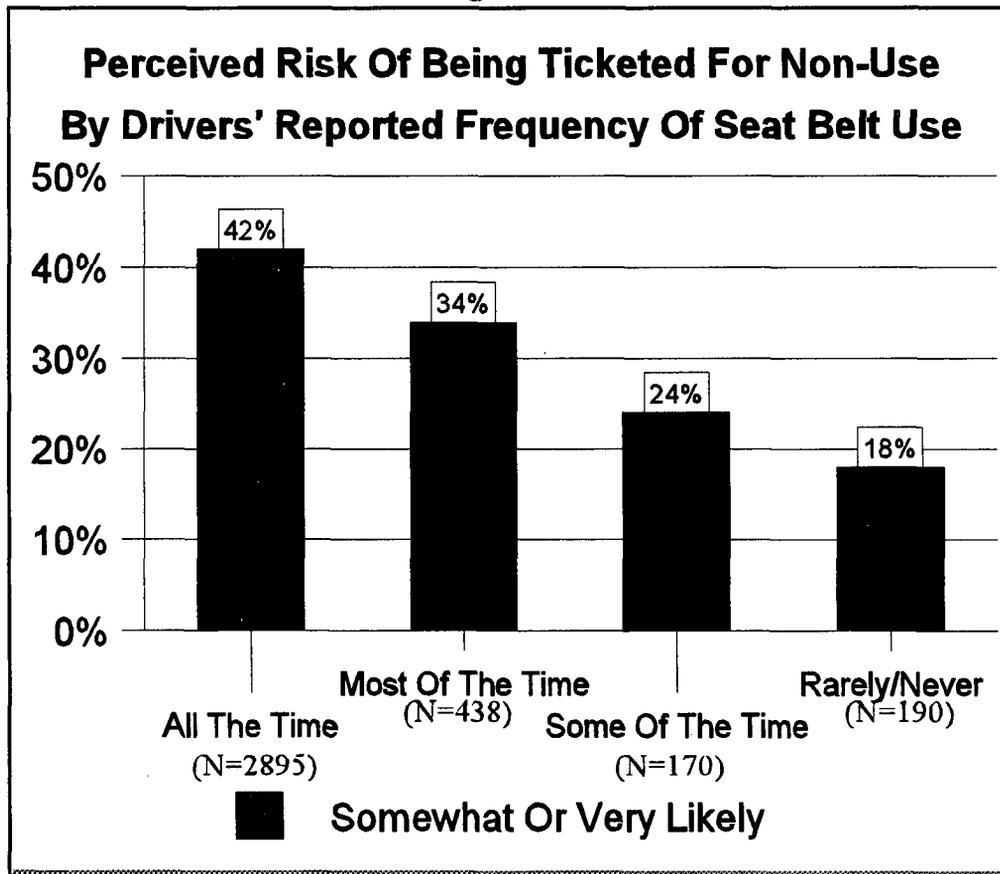
Base: Drives a motor vehicle.

Unweighted N's listed above.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Drivers who wore their seat belts more often were more likely than other drivers to perceive themselves at-risk of being ticketed if they did not use their seat belts at all. Among self-reported “all the time” seat belt users, 42% thought it was either somewhat likely or very likely that they would receive a ticket if they did not wear a seat belt at all while driving over the next six months. The number dropped to 34% among “most of the time” users, and 24% among “some of the time” users. Fewer than one-in-five (18%) of those who said they rarely or never wore seat belts thought they would likely get a ticket.

Figure 98



Qx: When driving this (car/truck/van) how often do you wear your (shoulder/lap) belt?

Qx: Assume that you do not wear your seat belt AT ALL while driving over the next six months. How likely do you think you will be to receive a ticket for not wearing a seat belt?

*Base: Drivers whose primary vehicle has seat belts.
Unweighted N's listed above.*

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Among the demographic groups listed in Table 41, greatest perceived risk of being ticketed for non-use of seat belts over a period of six months was recorded for Hispanics. More than half (56%) considered it very likely or somewhat likely they would be given a ticket, compared to 37% of non-Hispanics. In addition, perceived risk of being ticketed was somewhat higher than the norm (39%) for females (43%), blacks (42%), and the oldest age groups (46% of those age 55 and older).

TABLE 41
Perceived Risk Of Being Ticketed For Non-Use
By Sex, Age, Race, And Ethnicity

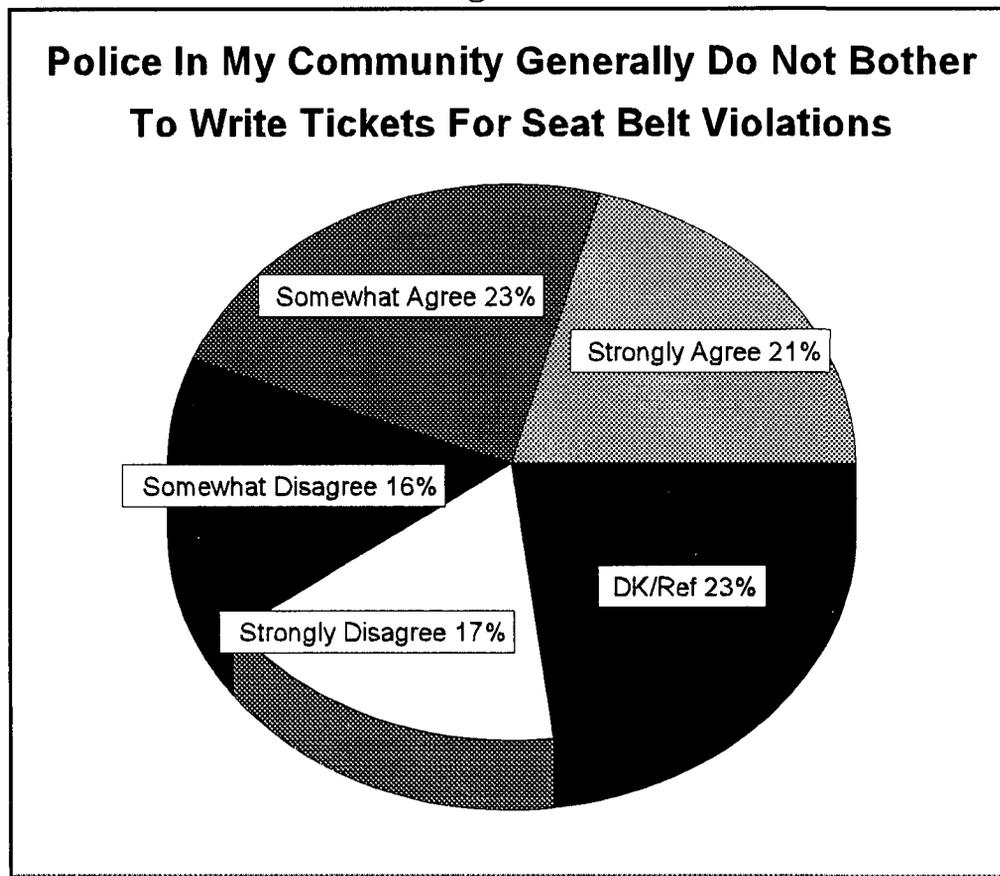
Qx: Assume that you do not wear your seat belt AT ALL while driving over the next six months. How likely do you think you will be to receive a ticket for not wearing a seat belt?

| | Very Likely | Somewhat Likely | Somewhat Unlikely | Very Unlikely | DK/Ref | N-Size |
|--------------|-------------|-----------------|-------------------|---------------|--------|--------|
| Total | 18% | 21% | 22% | 35% | 5% | (3721) |
| Sex | | | | | | |
| Female | 21% | 22% | 20% | 31% | 6% | (1932) |
| Male | 15% | 20% | 23% | 38% | 4% | (1789) |
| Age | | | | | | |
| 16-20 | 10% | 27% | 28% | 35% | 1% | (328) |
| 21-24 | 14% | 21% | 26% | 37% | 1% | (268) |
| 25-34 | 15% | 21% | 22% | 40% | 2% | (987) |
| 35-44 | 15% | 21% | 24% | 36% | 3% | (880) |
| 45-54 | 20% | 19% | 22% | 34% | 6% | (507) |
| 55-64 | 24% | 21% | 20% | 29% | 6% | (299) |
| 65+ | 26% | 20% | 15% | 29% | 11% | (413) |
| Race | | | | | | |
| Black | 25% | 17% | 20% | 36% | 2% | (354) |
| White | 16% | 21% | 23% | 35% | 5% | (2868) |
| Ethnicity | | | | | | |
| Hispanic | 32% | 24% | 14% | 27% | 3% | (312) |
| Non-Hispanic | 17% | 21% | 23% | 35% | 5% | (3383) |

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

One of the new attitude questions included in the 1998 survey asked respondents their level of agreement with the statement "Police in my community generally do not bother to write tickets for seat belt violations." The public was more likely to agree with that statement (44%) than to disagree (32%). However, many people (23%) said they did not know the answer.

Figure 99



Qx: Now I'm going to read you a few statements. Please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree. "Police in my community generally do not bother to write tickets for seat belt violations."

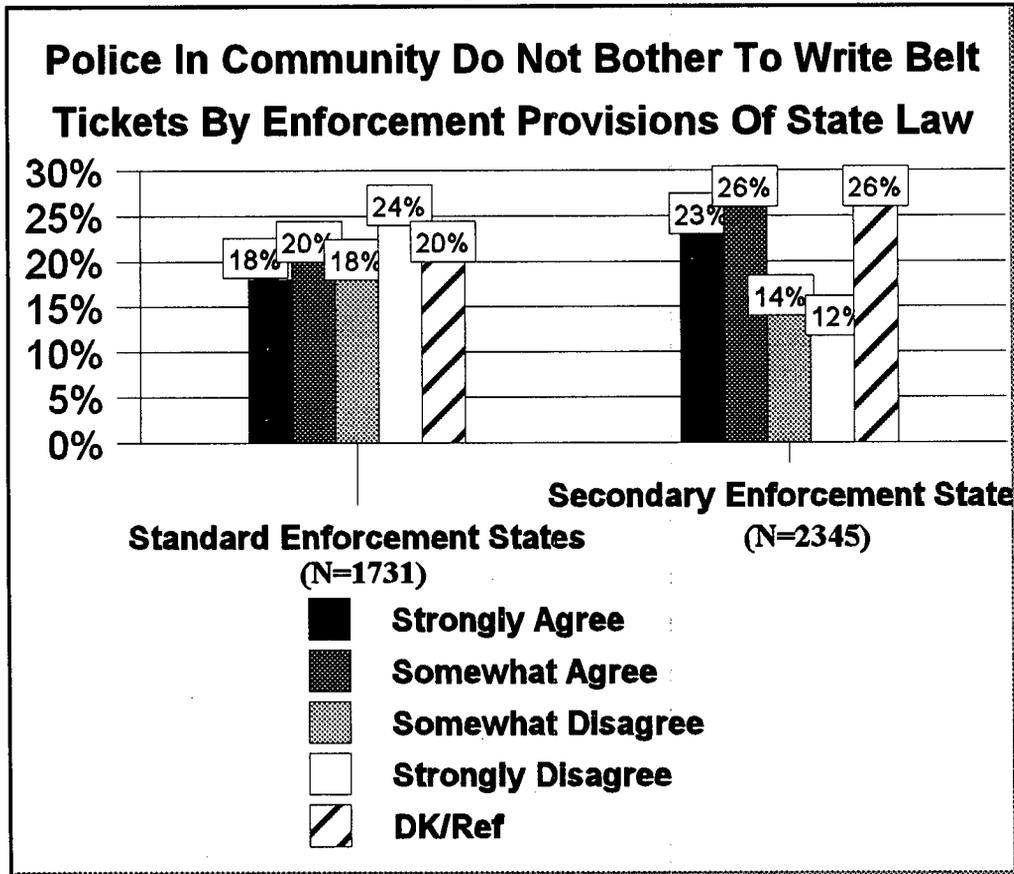
Base: Total population age 16+

Unweighted N=4094

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Respondents were less likely to (strongly or somewhat) agree that police in their community did not bother to write seat belt tickets if they lived in standard enforcement States (38%) than in secondary enforcement States (48%). In fact, there were more persons who disagreed with the statement (42%) than agreed with it (38%) in the standard enforcement States.

Figure 100



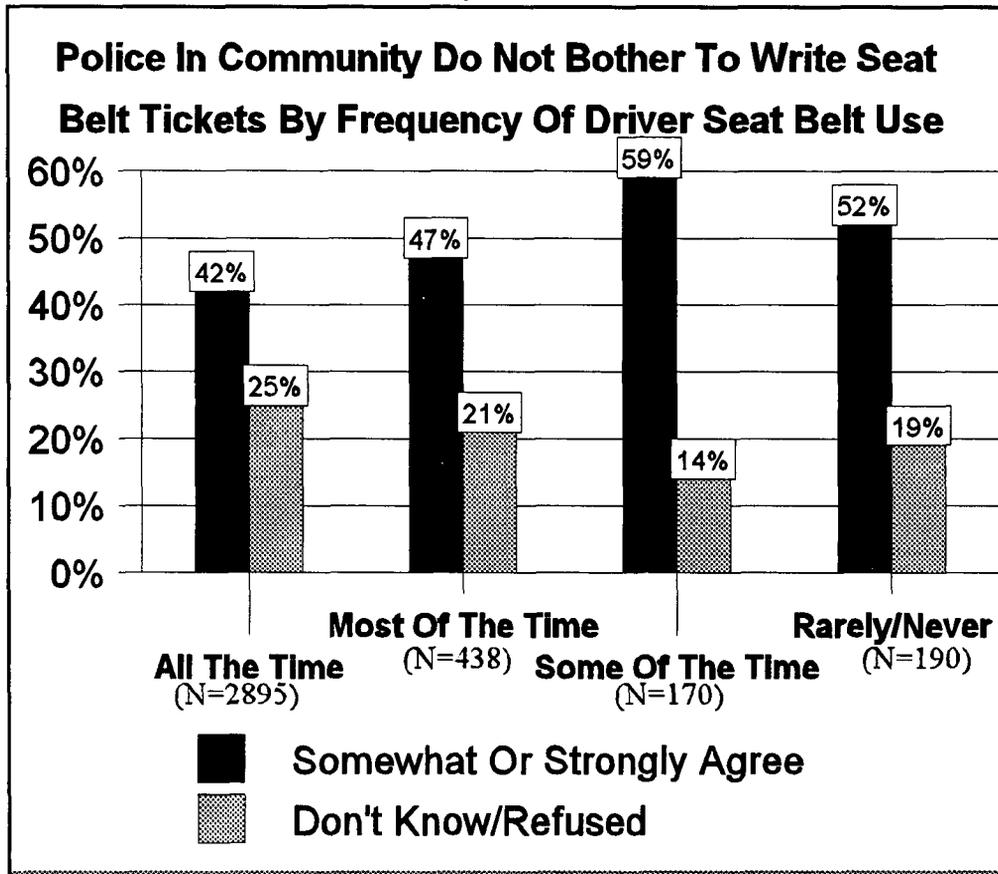
Qx: Now I'm going to read you a few statements. Please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree. "Police in my community generally do not bother to write tickets for seat belt violations."

*Base: Total population age 16+
 Unweighted N's listed above.*

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Infrequent users of seat belts were less likely than frequent users to believe that local police enforced the seat belt law. However, even among regular seat belt users, more than four-in-ten agreed with the statement that police in their community do not bother to write seat belt tickets, and more than 20% did not know.

Figure 101



Qx: When driving this (car/truck/van) how often do you wear your (shoulder/lap) belt?

Qx: Now I'm going to read you a few statements. Please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree. "Police in my community generally do not bother to write tickets for seat belt violations."

Base: Drivers whose primary vehicle has seat belts.

Unweighted N's listed above.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Persons ages 16-20 (60%) and 21-24 (56%) were most likely among the groups listed below to agree that ticketing for seat belt violations generally did not occur in their community; those age 65 and older were the most unsure (37%). Blacks and Hispanics differed from whites and non-Hispanics principally in that the former two groups were more likely to strongly disagree with the statement and less likely to express uncertainty.

TABLE 42
“Police In My Community Generally Do Not Bother To Write Tickets For Seat Belt Violations”
By Sex, Age, Race, And Ethnicity

Qx: Now I'm going to read you a few statements. Please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree. “Police in my community generally do not bother to write tickets for seat belt violations.”

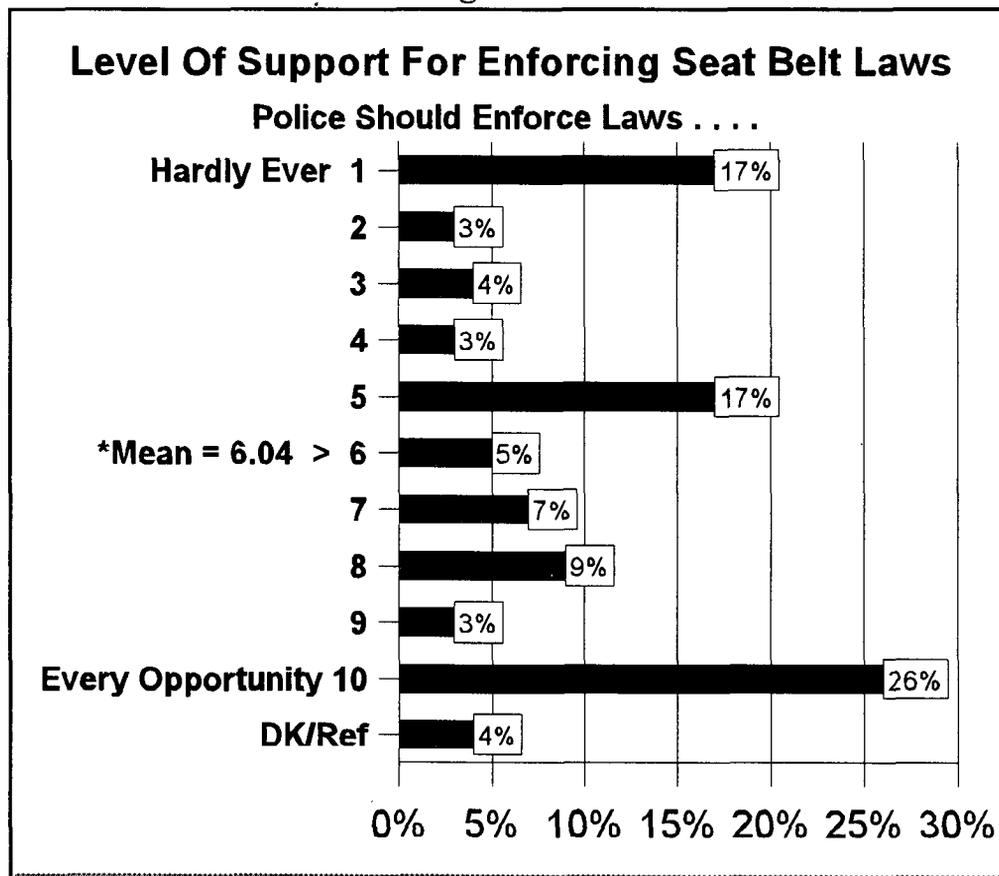
| | Strongly Agree | Somewhat Agree | Somewhat Disagree | Strongly Disagree | DK/Ref | N-Size |
|--------------|----------------|----------------|-------------------|-------------------|--------|--------|
| Total | 21% | 23% | 16% | 17% | 23% | (4094) |
| Sex | | | | | | |
| Female | 20% | 22% | 14% | 17% | 28% | (2185) |
| Male | 22% | 25% | 17% | 17% | 19% | (1909) |
| Age | | | | | | |
| 16-20 | 24% | 36% | 17% | 16% | 6% | (398) |
| 21-24 | 26% | 30% | 14% | 19% | 11% | (302) |
| 25-34 | 19% | 28% | 17% | 17% | 20% | (1066) |
| 35-44 | 22% | 21% | 16% | 16% | 25% | (931) |
| 45-54 | 16% | 22% | 19% | 20% | 24% | (542) |
| 55-64 | 24% | 18% | 12% | 21% | 25% | (330) |
| 65+ | 21% | 16% | 13% | 13% | 37% | (479) |
| Race | | | | | | |
| Black | 22% | 20% | 16% | 24% | 17% | (427) |
| White | 20% | 24% | 16% | 15% | 26% | (3058) |
| Ethnicity | | | | | | |
| Hispanic | 23% | 23% | 17% | 23% | 14% | (406) |
| Non-Hispanic | 21% | 23% | 15% | 16% | 25% | (3652) |

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Preferred Level Of Enforcement

Support for seat belt law enforcement was mixed, with some favoring strong enforcement and others wanting little or no enforcement. Interviewers asked respondents how strictly police should enforce seat belt laws, using a scale from 1 to 10, where 1 meant police should hardly ever give tickets for seat belt violations and 10 meant they should give tickets at every opportunity. Most frequently, the respondents said they favored ticketing at every opportunity, although there also was clustering at the middle and low end of the scale. The average score was 6.04.

Figure 102



Qx: How often do you think police should ticket for seat belt violations? On a scale of 1 to 10, where 1 means police should hardly ever give tickets and 10 means police should give tickets at every opportunity when it comes to enforcing seat belt laws, how strict should police enforcement be?

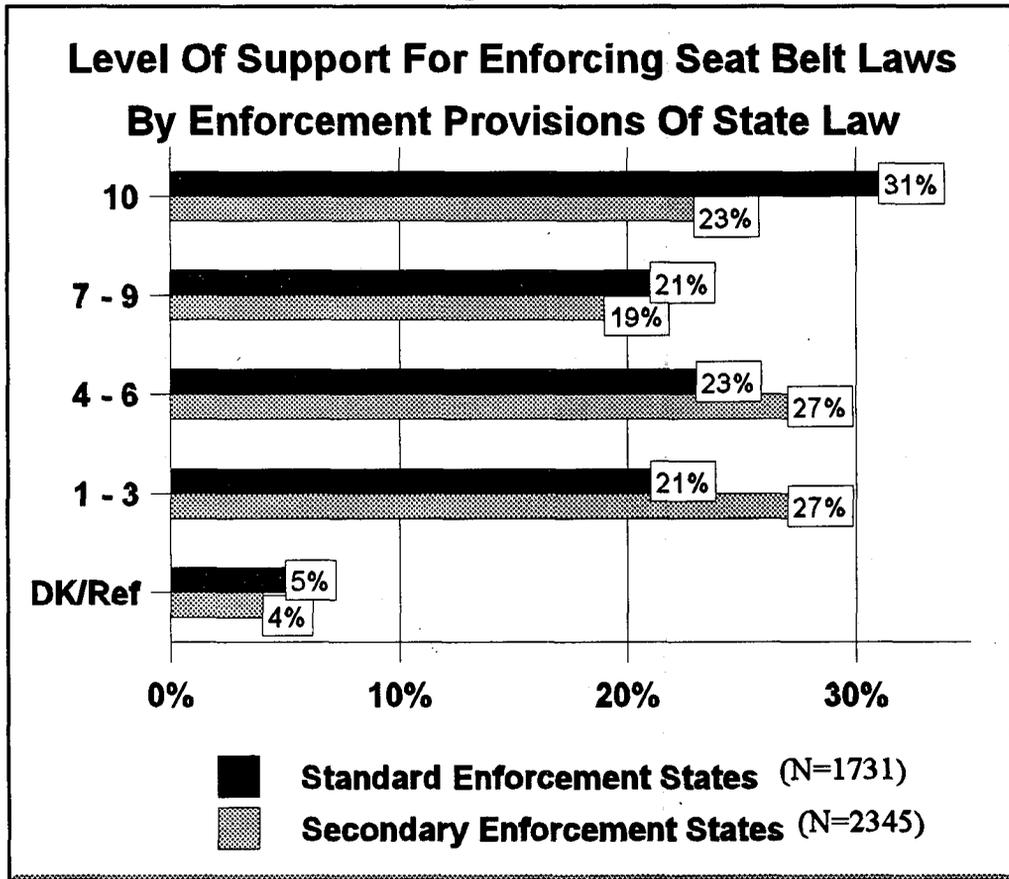
Base: Total population age 16+ Unweighted N=4094

**The mean excludes respondents in the Don't Know/Refused category*

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Persons in standard enforcement States tended towards supporting stricter enforcement of seat belt laws than did those in secondary enforcement States. The mean score recorded for the respondents in standard enforcement States was 6.47 on the ten-point-scale, versus 5.74 for respondents in secondary enforcement States.

Figure 103



Qx: How often do you think police should ticket for seat belt violations? On a scale of 1 to 10, where 1 means police should hardly ever give tickets and 10 means police should give tickets at every opportunity when it comes to enforcing seat belt laws, how strict should police enforcement be?

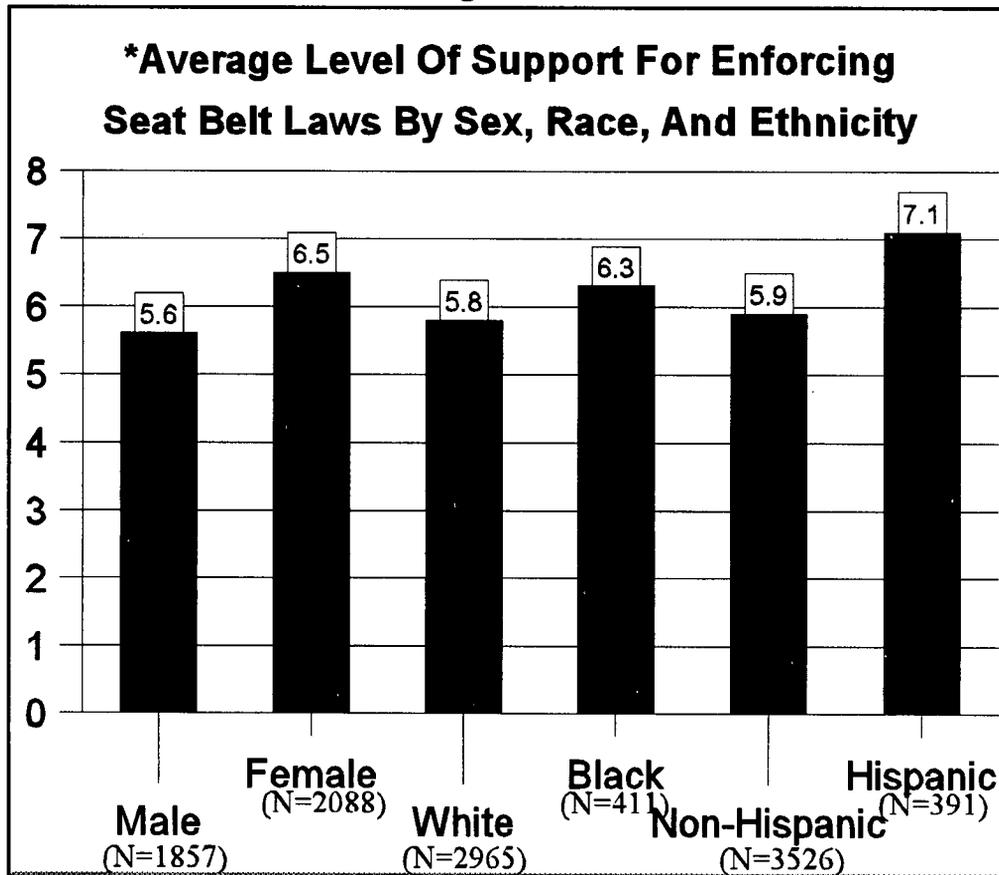
Base: Total population age 16+

Unweighted N's listed above.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Hispanics voiced particularly strong support for enforcement of seat belt laws, providing an average score of 7.1 on the 10 point scale. Blacks and females also were above the mean population average of 6.0.

Figure 104



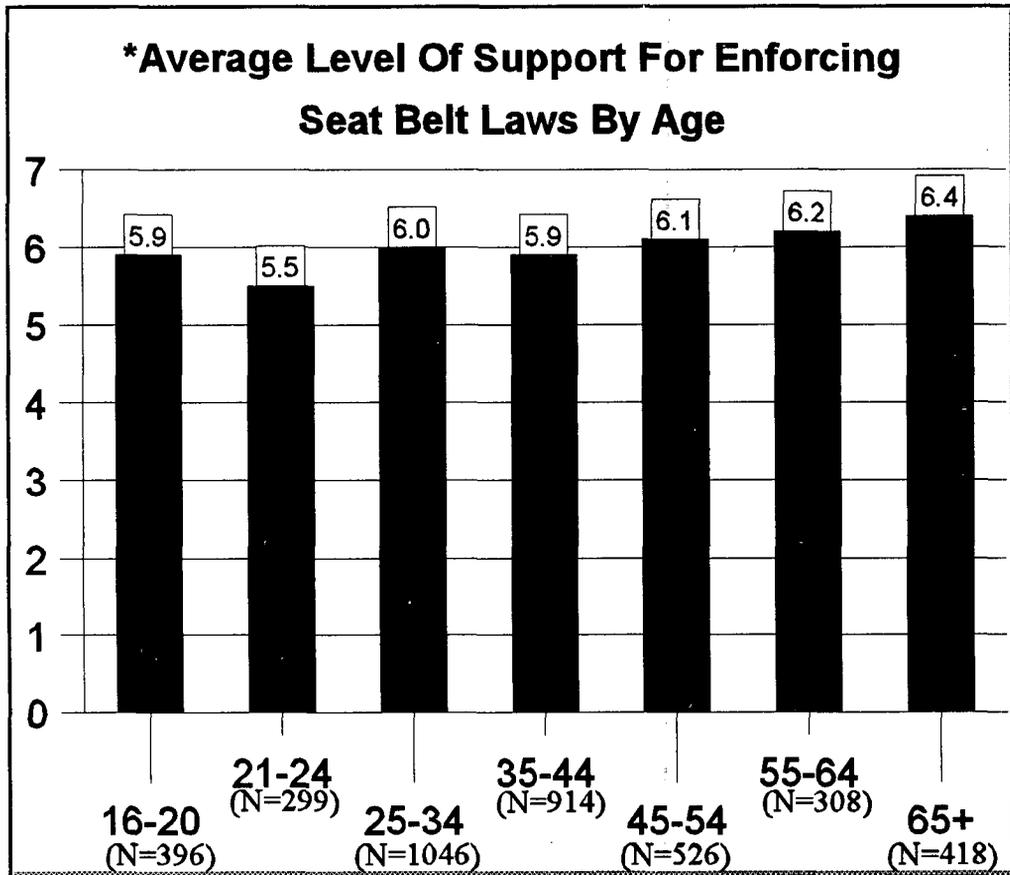
Qx: How often do you think police should ticket for seat belt violations? On a scale of 1 to 10, where 1 means police should hardly ever give tickets and 10 means police should give tickets at every opportunity when it comes to enforcing seat belt laws, how strict should police enforcement be?
Base: Total population age 16+ who chose a scale value from 1 to 10.
Unweighted N's listed above.

**Excludes persons who said they "didn't know" or else refused to answer when asked what value they would choose from the 10 point scale.*

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Age differences in level of support for enforcement of seat belt laws were generally smaller than the differences shown on the preceding page. The least support appeared among persons ages 21 through 24.

Figure 105



*Qx: How often do you think police should ticket for seat belt violations? On a scale of 1 to 10, where 1 means police should hardly ever give tickets and 10 means police should give tickets at every opportunity when it comes to enforcing seat belt laws, how strict should police enforcement be?
 Base: Total population age 16+ who chose a scale value from 1 to 10
 Unweighted N's listed above.*

**Excludes persons who said they "didn't know" or else refused to answer when asked what value they would choose from the 10 point scale.*

1998 SURVEY RESULTS

CHAPTER 5

1994-1998 TRENDS

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Drivers and Vehicles, 1994-1998

There was little appreciable change between 1994 and 1998 in the frequency with which the public age 16 and older drove motor vehicles. As in previous years, more than 90% of the public in 1998 said they drove a motor vehicle, usually almost every day.

TABLE 43. Driving Frequency, 1994-1998

Qx: How often do you drive a motor vehicle?

Base: Total population age 16+

| Driving Frequency | 1994 | 1996 | 1998 |
|--------------------|------|------|------|
| Almost every day | 79% | 80% | 78% |
| A few days a week | 10% | 10% | 10% |
| A few days a month | 2% | 2% | 2% |
| A few days a year | 1% | 1% | 1% |
| Never | 8% | 8% | 9% |

Cars continued to decrease as a proportion of the vehicle fleet. The percentage of persons who answered that their primary vehicle was a sport utility vehicle edged upwards, but a slight change in the wording of the question in 1998 may have contributed to this. Unlike previous years, the term "sport utility vehicle" was included in the stem of the survey question.

TABLE 44. Type of Primary Vehicle Driven, 1994-1998

Qx: Is the vehicle you drive most often a car, van, motorcycle, sport utility vehicle, pickup truck, or other type of truck?

Base: Drives a motor vehicle

| Type of Vehicle | 1994 | 1996 | 1998 |
|-----------------------|------|------|------|
| Car | 71% | 67% | 65% |
| Van/Minivan | 9% | 9% | 10% |
| Sport Utility Vehicle | 3% | 5% | 8% |
| Pickup Truck | 15% | 17% | 16% |

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Type of Driver-Side Seat Belts, 1994-1998

The 1998 survey observed a continued increase in one-piece belt systems. The one-piece manual lap and shoulder system now accounts for 75% of driver seat belts in primary vehicles. The once ubiquitous lap only system now appears in only 2% of all primary vehicles at the driver seating position.

TABLE 45. Seat Belt Configuration In Front Seat Of Primary Vehicle, 1994-1998

Qx: Do the seat belts in the front seat of the (vehicle) go across your shoulder only, across your lap only, or across both your shoulder and lap?

Qx: Are the shoulder and lap belt one piece or are they two separate belts?

Qx: Are both the shoulder and lap belt automatic, is only the shoulder belt automatic or is neither the shoulder or lap belt automatic?

Qx: Is the shoulder belt automatic or do you have to fasten it?

Base: Vehicle driven most often is not a motorcycle.

| Seat Belt Type | 1994 | 1996 | 1998 |
|-------------------------------------|-------|-------|-------|
| Basic Configuration | | | |
| Shoulder Only | 8% | 7% | 7% |
| Lap Only | 4% | 3% | 2% |
| Shoulder And Lap | 88% | 90% | 90% |
| Type Of Driver Seat Belt | | | |
| One-Piece Systems | [85%] | [86%] | [88%] |
| Lap Belt Only | 4% | 3% | 2% |
| Lap/Shoulder-Manual | 70% | 72% | 75% |
| Lap/Shoulder-Automatic | 3% | 4% | 4% |
| Shoulder Only-Manual | 7% | 6% | 6% |
| Shoulder Only-Automatic | 1% | 1% | 1% |
| One-Piece-DK If Automatic | * | * | * |
| Two-Piece Systems | [14%] | [13%] | [12%] |
| Lap Manual/Shoulder Manual | 6% | 5% | 4% |
| Lap Manual/Shoulder Automatic | 8% | 7% | 6% |
| Lap Automatic/Shoulder Automatic | 1% | 1% | 1% |
| Two-Piece-DK If Automatic | * | * | * |
| DK If One-Piece Or Two-Piece | 1% | 1% | * |

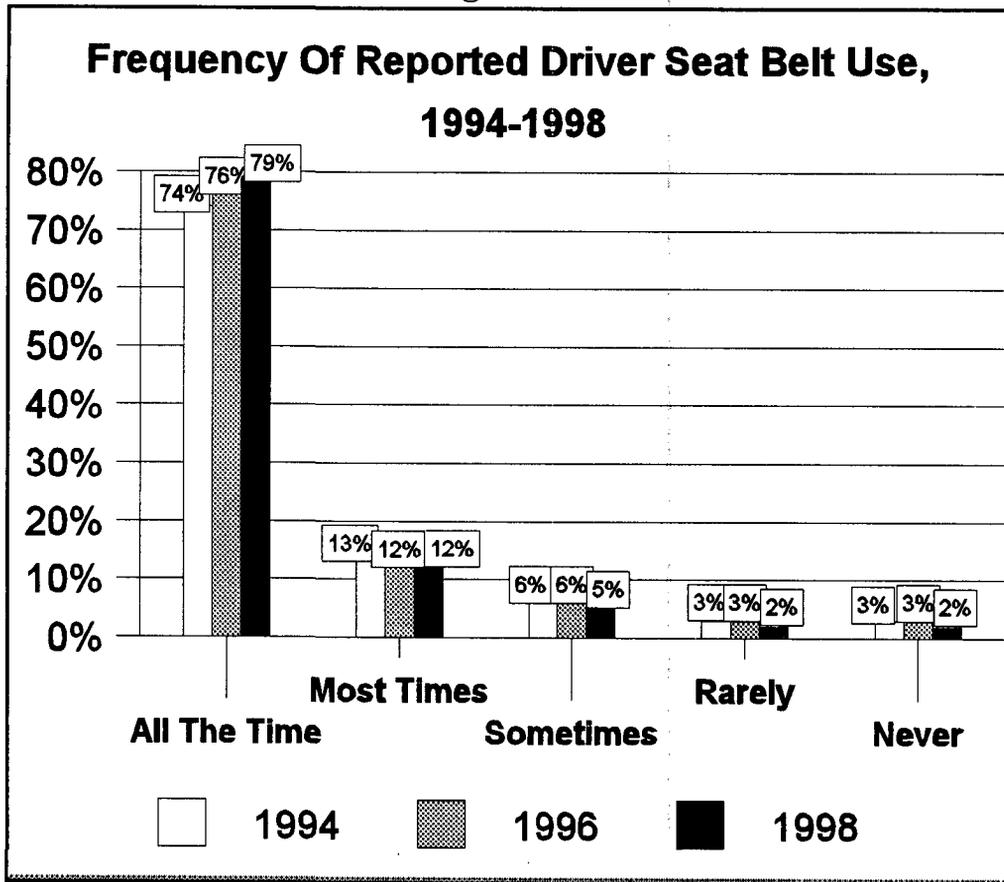
*Less than 0.5%

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Driver's Use of Seat Belts, 1994-1998

The public is increasingly reporting that they use seat belts on a regular basis. The percentage of drivers age 16 and older who said that they always used their seat belt while driving has increased 5 percentage points since 1994, from 74% to 79%.

Figure 106

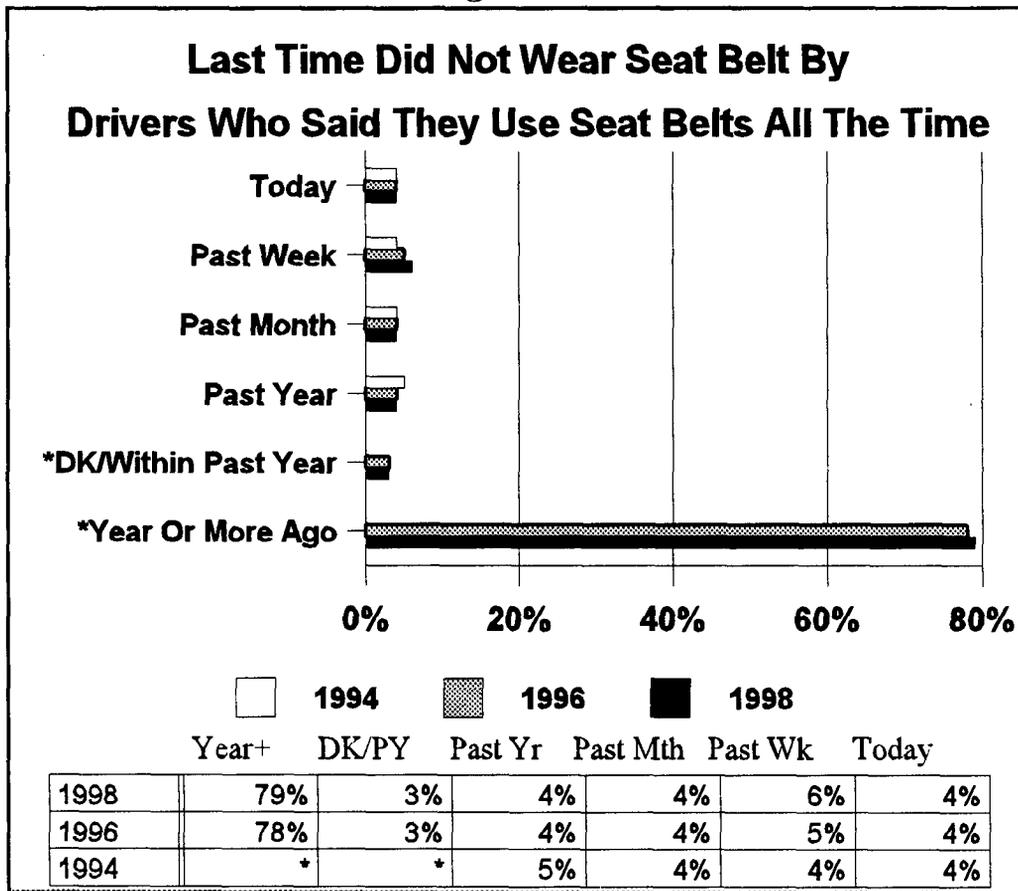


Qx: When driving this (car/truck/van) how often do you wear your (shoulder/lap) belt?
Base: Drivers whose primary vehicle has seat belts.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Although more people reported using seat belts “all the time” in 1998, many of these full time users still indicated that they had not worn their seat belt recently while driving. Ten percent of drivers who said they used their seat belt all of the time acknowledged on a follow-up question that they did not use their seat belt while driving at least once during the past day or week. If anything, this was an increase over 1996 (9%) and 1994 (8%).

Figure 107



Qx: When was the last time you did not wear your seat belt when driving?

Qx: Has there been any occasion in the past 12 months when you did not wear your seat belt (neither lap nor shoulder) when driving?

Base: Drivers whose primary vehicle has seat belts, and said they wore the belts “all the time.”

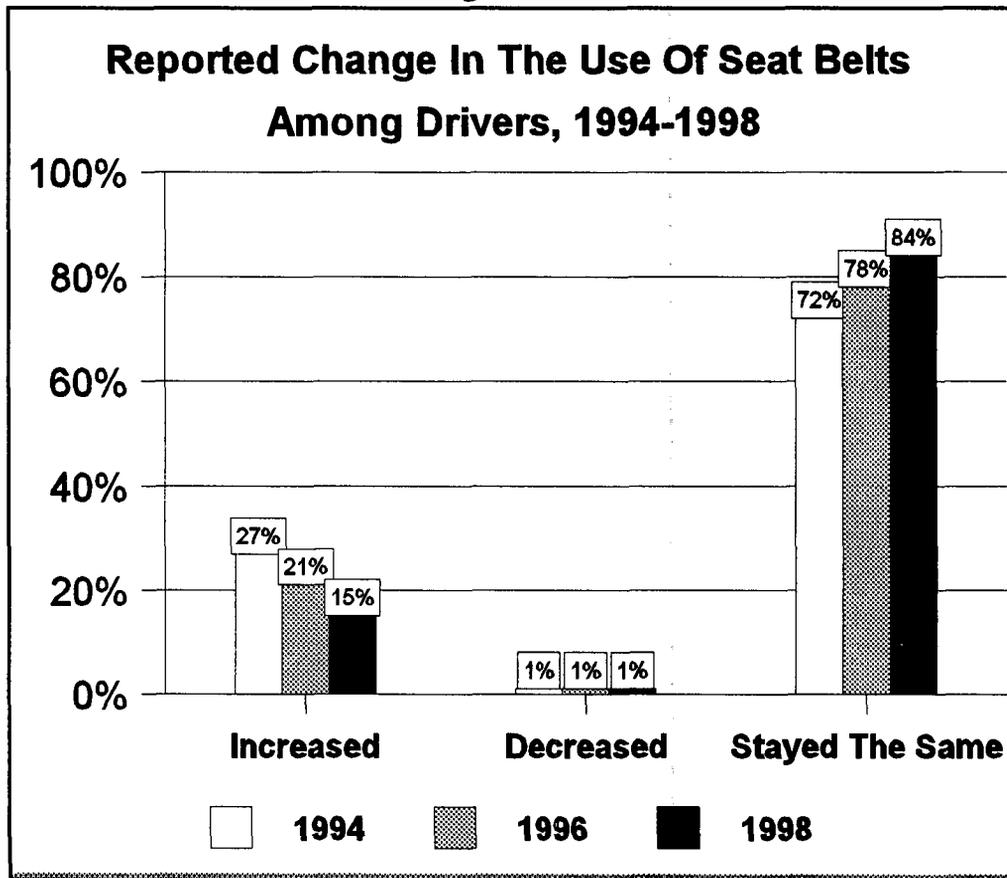
**A follow-up question was added in 1996 asking persons who did not know the last time they failed to wear their seat belt whether or not it occurred in the past year. These persons were then apportioned into the “Year Or More” and “Don’t Know/Within Past Year” categories in 1996 and 1998 (thus 1994 was not comparable for these categories).*

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Reported Changes in Driver Seat Belt Use, 1994-1998

The percentage of drivers who said they increased their seat belt use over the past year has declined sharply since 1994. In 1994, 27% of drivers reported that their use of seat belts while driving in the past twelve months had increased. Only 15% made the same statement in 1998.

Figure 108



Qx: In the past 12 months, has your use of seat belts when driving (car driven most often) increased, decreased, or stayed the same?

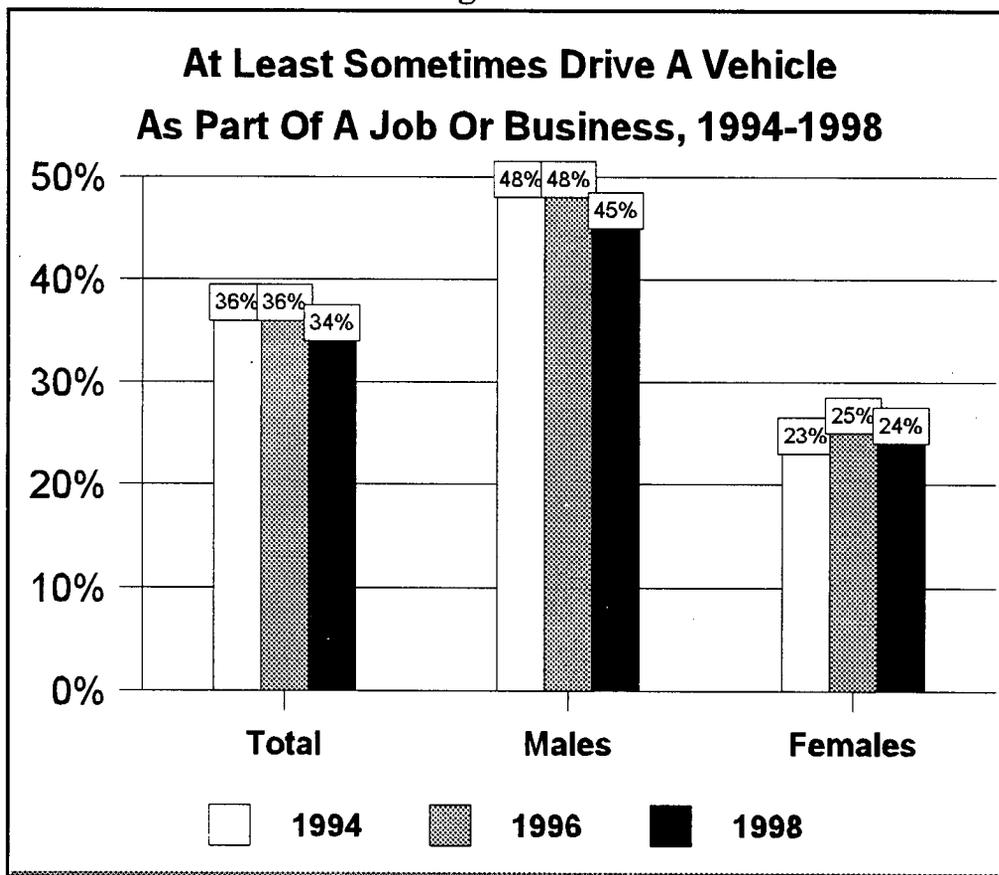
Base: Drivers whose primary vehicle has seat belts.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Driving On The Job, 1994-1998

The percentage of drivers who drove on the job was 34% in 1998, compared to 36% in both 1996 and 1994. In 1998, 56% of drivers who said they drove on the job did so almost every day, compared to 54% in 1996 and 56% in 1994.

Figure 109



Qx: Not including driving to and from work, do you at least sometimes drive a vehicle as part of a job or business?

Base: Drives a motor vehicle.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Company Seat Belt Policy, 1994-1998

Drivers who said they drove on the job were asked if their company had a seat belt policy. If they answered "yes," the interviewers then asked them if it was a written policy.

The data showed a drop in 1998 in the percentage of drivers who said their company had a policy requiring seat belt use when driving on the job, declining to fewer than half of all drivers who drove on the job. As in previous years, two-thirds thought it was a written policy.

TABLE 46. Company Seat Belt Policy -- Written Or Unwritten, 1994-1998

Qx: Does your company or business have a policy requiring seat belt use when driving on the job?

Qx: Is that a written policy?

Base: Drivers who drive on the job.

| | 1994 | 1996 | 1998 |
|---|------------|------------|------------|
| Company Has Policy | 52% | 53% | 48% |
| Policy Is Written: Yes | 66% | 67% | 67% |
| No | 25% | 24% | 25% |
| Don't Know | 9% | 9% | 8% |
| Company Doesn't Have Policy | 43% | 42% | 45% |
| Don't Know If Company Has Policy | 5% | 5% | 6% |

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Frequency Of Front Seat Passenger Seat Belt Use, 1994-1998

In 1994, only respondents who said they usually sat in the front seat when riding as passengers were asked their frequency of seat belt use in that passenger seating position. Similarly, those who usually sat in the back seat when they rode as passengers were asked only about seat belt use in the back. The later surveys restructured this section so that everyone was asked their seat belt use for each seating position. However, comparisons to 1994 are restricted to seat belt use in the respondent's usual seating position. As shown in Table 47, reported seat belt use on the front passenger side was essentially unchanged from 1996 to 1998 for those who usually rode in that seating position as passengers, although both years were slightly higher than 1994.

Regarding the total population's reported seat belt use as front seat passengers (1996/1998 data), there again was little difference between 1996 and 1998. In 1998, 74% said they used seat belts "all the time" when riding in the front passenger seat, 13% used them most of the time, 6% some of the time, 3% rarely used them, and 4% never used them. The comparable figures for 1996 were 73% all the time, 14% most times, 7% sometimes, 3% rarely, and 3% never.

**TABLE 47. Frequency Wear Seat Belt As Front Seat Passenger
For Those Who Usually Ride In The Front Seat, 1994-1998**

Qx: When you are a passenger, do you usually ride in the front seat or the back seat?
Qx: When riding as a passenger in the front seat how often do you wear your seat belt?
Base: Usually ride in the front seat when riding as a passenger.

| Frequency Of Front Seat Passenger Seat Belt Use | 1994 | 1996 | 1998 |
|--|------|------|------|
| All Of The Time | 69% | 73% | 74% |
| Most Of The Time | 16% | 14% | 14% |
| Some Of The Time | 8% | 7% | 6% |
| Rarely | 4% | 3% | 3% |
| Never | 4% | 3% | 4% |

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Frequency Of Back Seat Passenger Seat Belt Use, 1994-1998

In 1998, there was an increase in reported “all the time” seat belt use in the back seat among persons who usually rode in that seating position. Since there were only slightly more than 250 persons in the sample each year who usually rode in the back seat as passengers, the difference was not statistically significant. However, when the total population was considered (i.e., including those who usually sat in the front as passengers; 1996/1998 data), the same pattern emerged. In 1998, 43% said they wore their seat belt “all the time” when riding in the back compared to 37% in 1996. These latter figures were based on more than 3800 cases per year.

| TABLE 48. Frequency Wear Seat Belt As Back Seat Passenger For Those Who Usually Ride In The Back Seat, 1994-1998 | | | |
|---|------|------|------|
| <i>Qx: When you are a passenger, do you usually ride in the front seat or the back seat?</i> | | | |
| <i>Qx: When riding as a passenger in the back seat how often do you wear your seat belt?</i> | | | |
| <i>Base: Usually ride in the back seat when riding as a passenger.</i> | | | |
| Frequency Of Back Seat Passenger Seat Belt Use | 1994 | 1996 | 1998 |
| All Of The Time | 41% | 41% | 46% |
| Most Of The Time | 16% | 11% | 13% |
| Some Of The Time | 12% | 18% | 15% |
| Rarely | 11% | 10% | 11% |
| Never | 19% | 20% | 15% |

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Most Important Reason For Seat Belt Use By Drivers, 1994-1998

In 1994 and 1996 the interviewers read 6 potential reasons for seat belt use to the respondents. They asked the respondents which of the reasons applied to them (they could choose more than one, and could volunteer "other" reasons as well), and then asked which single reason did the respondent consider the most important. In 1998 two additional reasons were included to the list. Despite the revision there was little appreciable change in the "most important" reason given. About two-thirds of the drivers continued to identify safety as their most important reason for wearing seat belts.

TABLE 49. Most Important Reason For Seat Belt Use: Drivers, 1994-1998

Qx: Of the following reasons you just gave me for wearing your seat belt, which is the most important?

Base: Drivers whose primary vehicle has seat belts, and who at least on occasion wear their seat belt.

| Reason | 1994 | 1996 | 1998 |
|---|------|------|------|
| I want to avoid serious injury. | 68% | 68% | 66% |
| It's the law. | 8% | 8% | 7% |
| It's a habit. | 7% | 6% | 6% |
| I want to set a good example for others. | NA | NA | 5% |
| I don't want to get a ticket. | 4% | 3% | 3% |
| I'm uncomfortable without it. | 3% | 3% | 3% |
| Others want me to wear it. | 2% | 2% | 1% |
| The people I'm with are wearing seat belts. | NA | NA | * |
| Other | 6% | 7% | 4% |
| All important, can't select just one. | 2% | 2% | 3% |

*Less than 0.5%

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Most Important Reason For Non-Use Of Seat Belts By Drivers, 1994-1998

The interviewers approached the reasons for non-use in the same manner they did the reasons for use (described on the previous page). The respondents were read eight reasons for non-use in each of the three years. The only change in 1998 was a revision in wording for one item: "because of the people I am with" became "the people I am with are not wearing seat belts." Table 50 shows little difference in the overall response between 1996 and 1998.

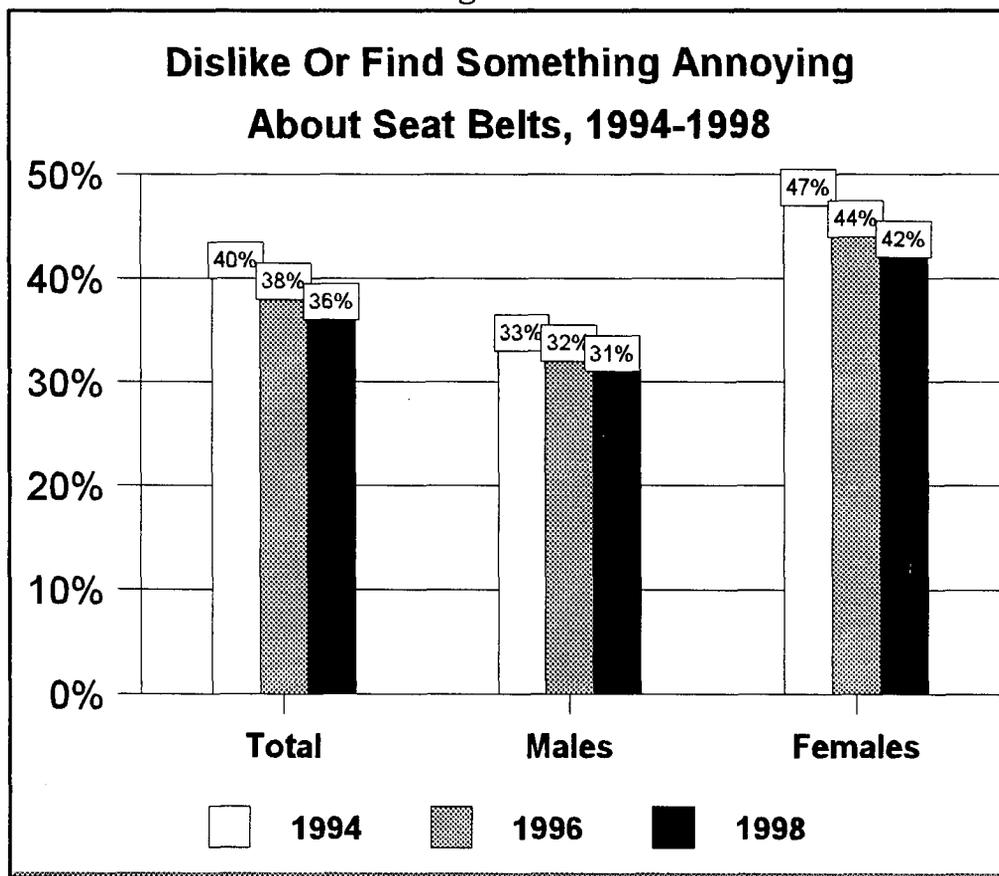
| TABLE 50. Most Important Reason For Not Wearing A Seat Belt: Drivers, 1994-1998 | | | |
|--|------|------|------|
| <i>Qx: Of the following reasons you just gave me for not wearing your seat belt, which is the most important?</i> | | | |
| <i>Base: Drivers whose primary vehicle has seat belts, and who at least on occasion do not wear their seat belt.</i> | | | |
| Reason | 1994 | 1996 | 1998 |
| I forget to put it on. | 24% | 23% | 24% |
| I'm only driving a short distance. | 17% | 24% | 22% |
| The seat belt is uncomfortable. | 10% | 10% | 12% |
| I'm in a rush. | 7% | 7% | 8% |
| The probability of being in a crash is too low. | 3% | 4% | 4% |
| I'm driving in light traffic. | 2% | 2% | 2% |
| I don't want my clothes to get wrinkled. | 2% | 1% | 1% |
| The people I'm with are not wearing seat belts. | 1% | 1% | 1% |
| Other | 7% | 9% | 7% |
| None of these reasons. | 22% | 16% | 17% |
| All are important, can't select just one. | 3% | 3% | 2% |

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Drivers Who Dislike Or Find Something Annoying About Seat Belts, 1994-1998

All drivers, regardless of whether or not they wore their seat belts regularly, were asked if there was anything that they particularly disliked or found annoying about wearing their seat belt. Slightly fewer drivers in 1998 (36%) than in 1996 (38%) or in 1994 (40%) answered “yes.” This was true for both males and females. Choking or pressure across the neck continued to be the single most frequent complaint.

Figure 110



Qx: Is there anything that you particularly dislike or find annoying about wearing your seat belt?

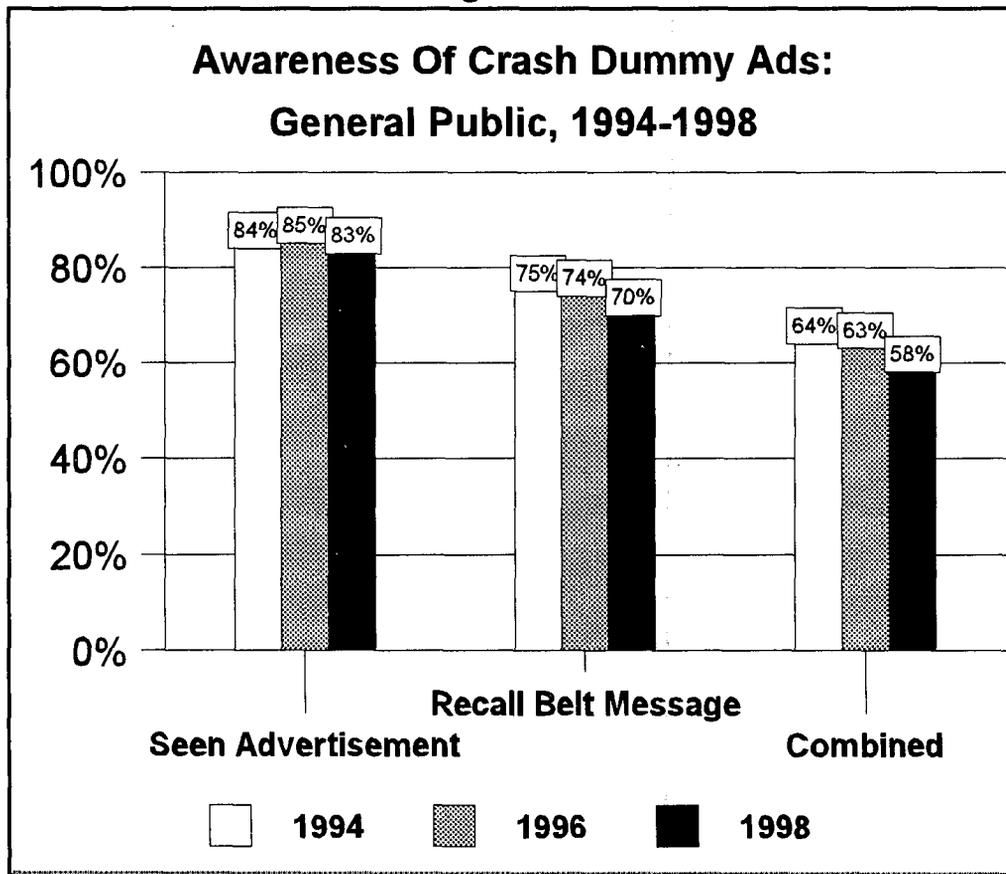
Base: Drives a motor vehicle that has seat belts.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Advertising Awareness, The Crash Dummies, 1994-1998

Public service announcements about seat belt use in which Vince and Larry, the crash dummies, were the central characters have been an important part of the U.S. Department of Transportation's efforts to encourage the public to wear seat belts. The 1998 survey found a decrease in reported exposure to these messages. While 83% of the public recalled seeing or hearing advertisements that used crash dummies, only 70% of these persons associated the crash dummy advertisements with a seat belt message, a smaller percentage than in previous years. This equated to 58% of the public in 1998 who recalled crash dummy ads with a seat belt message, compared to more than 60% in 1996 and 1994.

Figure 111



Qx: Have you seen or heard any advertisements that used crash dummies?

Qx: Could you tell me what advice or message the crash dummies advertised?

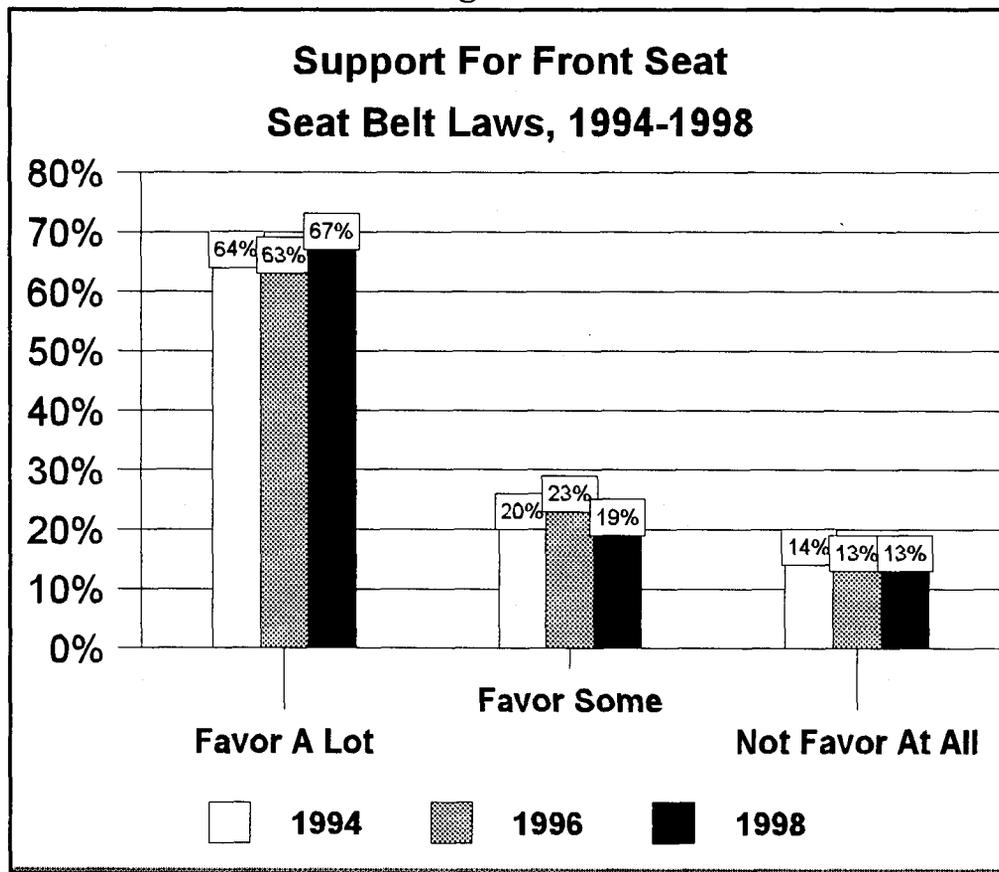
Base: Total population age 16+

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Support For Seat Belt Laws That Apply To The Front Seat, 1994-1998

Seat belt laws have been enacted throughout the country to increase seat belt use. In both 1996 and 1998, 86% of the public said they favored seat belt laws for drivers and front seat passengers (versus 84% in 1994). However, those who strongly favored the law increased slightly in 1998, from 63% to 67%.

Figure 112



Qx: How do you feel about laws that require drivers and front seat passengers to wear seat belts? Do you favor these laws a lot, do you favor them some, or do you not favor these laws at all?

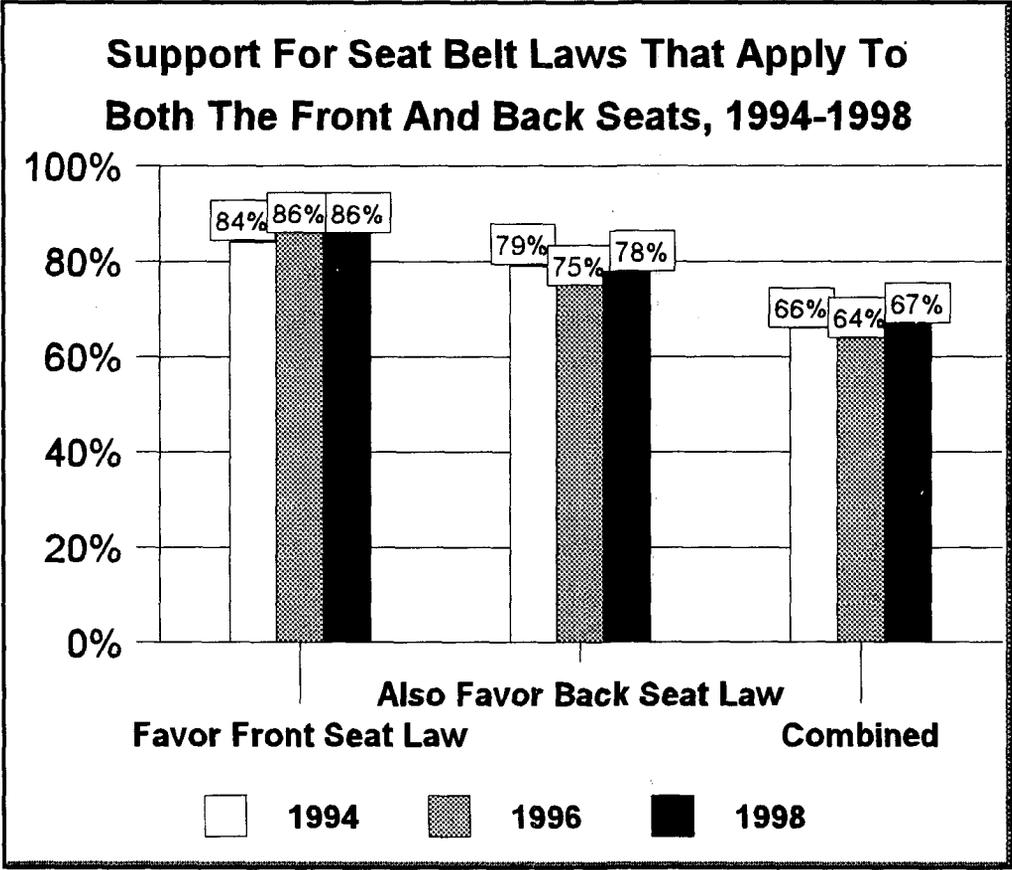
Base: Total population age 16+

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Support For Seat Belt Laws That Apply To Both The Front And Back Seats, 1994-1998

Of the 86% who favored front seat laws in 1998, 78% also favored having seat belt laws apply to the back seat, which translated into 67% who favored laws applicable to both the front and back seats. This compared to 64% in 1996.

Figure 113



Qx: How do you feel about laws that require drivers and front seat passengers to wear seat belts? Do you favor these laws a lot, do you favor them some or do you not favor these laws at all?

Qx: Do you think that seat belt laws should also apply to back seat adult passengers?

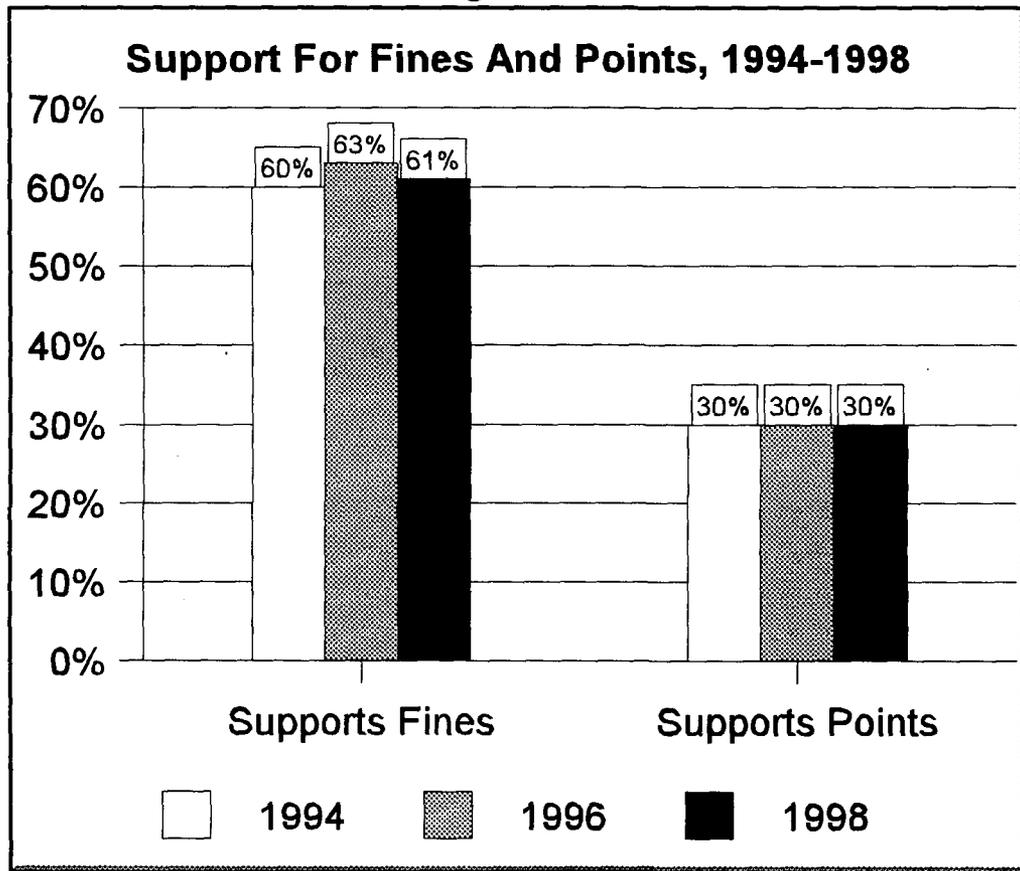
Base: Total population age 16+

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Support For Fines And Points, 1994-1998

The level of public support for fines and points as sanctions for violating seat belt laws has largely stayed the same since 1994, with about twice as many persons supporting fines as supporting points.

Figure 114



Qx: Do you favor or oppose fines for drivers who do not wear seat belts?

Qx: Do you favor or oppose receiving points against a license as a penalty for seat belt violations?

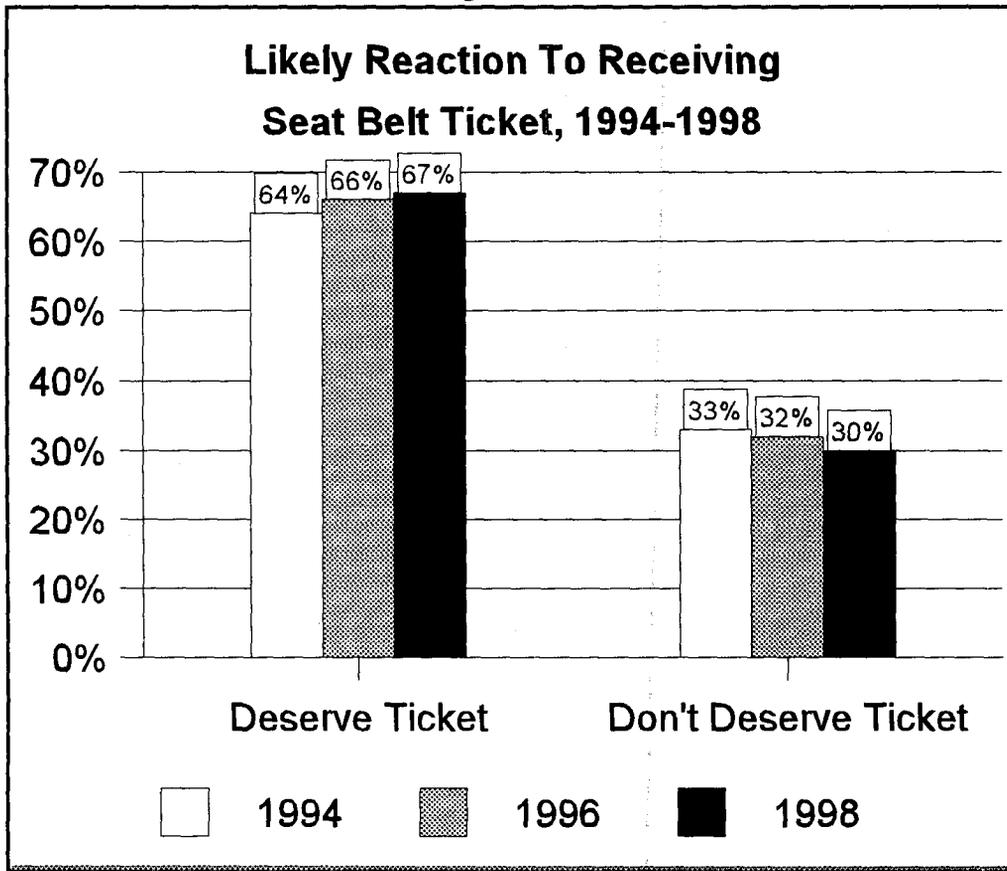
Base: Total population age 16+

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Likely Reaction To Receiving Seat Belt Ticket, 1994-1998

The interviewers asked the respondents which of the following would be their more likely reaction to receiving a seat belt ticket: that they deserved the ticket because they broke the law, or that they did not deserve the ticket because wearing a seat belt should be a personal choice. The public has changed very little in their response to this question, although the movement has been toward feeling the ticket was deserved.

Figure 115



Qx: Suppose you get a ticket for not wearing your seat belt. Which of the following statements better describes your likely reaction? I deserve the ticket because I broke the law, or I do NOT deserve the ticket because wearing a seat belt should be a personal choice.

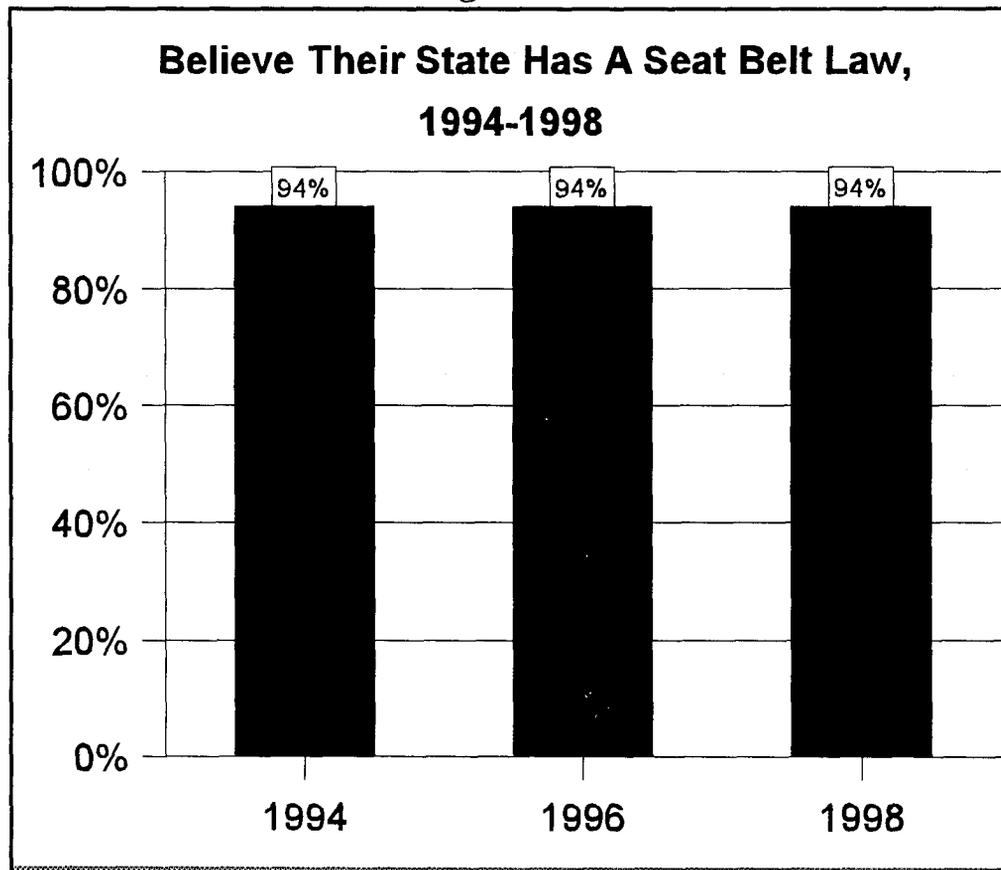
Base: Total population age 16+

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Believe Their State Has A Seat Belt Law, 1994-1998

The interviewers asked all respondents if their State had a law requiring seat belt use. The response did not change across the three years of the survey; 94% believed there was a seat belt law. During the 1994 survey, 47 States had seat belt laws that applied to adults. In 1996 and 1998, 49 States had such laws.

Figure 116



Qx: Does (STATE) have a law requiring seat belt use?

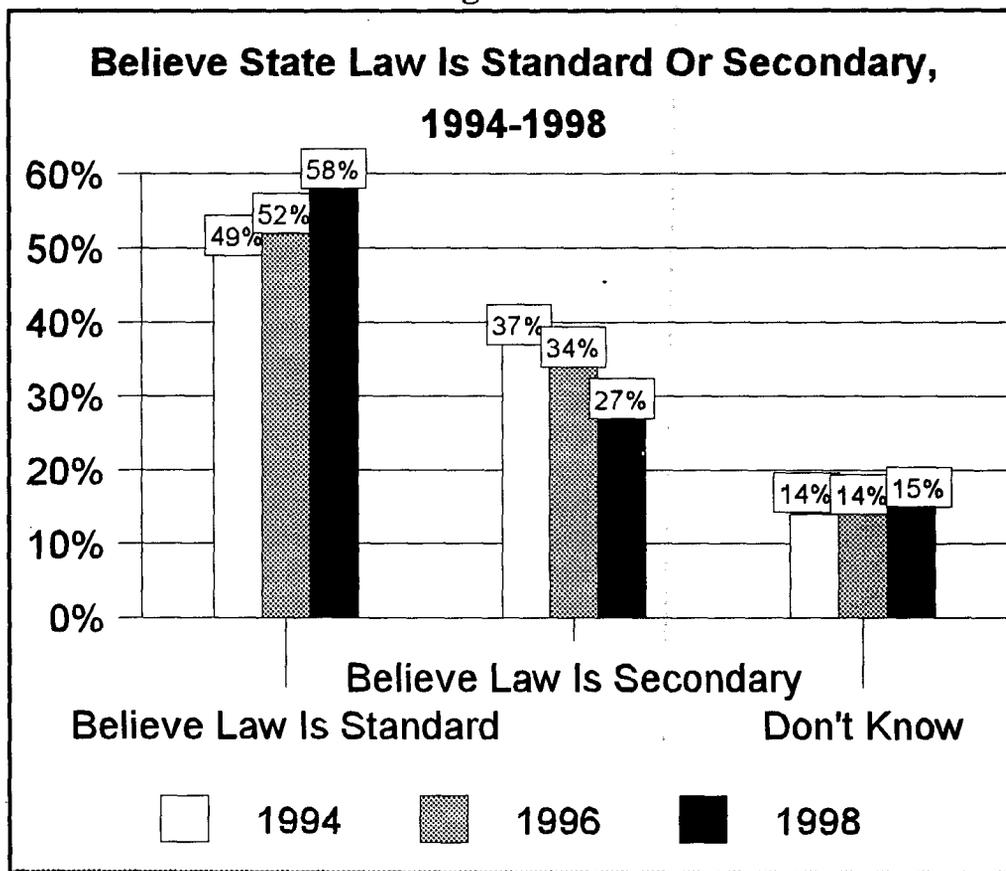
Base: Total population age 16+

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Knowledge of Standard Versus Secondary Enforcement, 1994-1998

At the time of the 1994 survey, 9 States had seat belt laws that permitted standard enforcement, where law enforcement officers could stop a vehicle on the basis of observing a seat belt violation. The number increased to 11 in 1996 and 14 in 1998. Over the same period of time, the survey showed an increase in the percentage of the public who believed that their State law included standard enforcement provisions. Among persons who believed their State had a seat belt law, 58% thought that the law provided for standard enforcement in 1998 compared to 49% in 1994.

Figure 117



Qx: According to your State law, can police stop a vehicle if they observe a seat belt violation, or do they have to observe some other offense first in order to stop the vehicle?

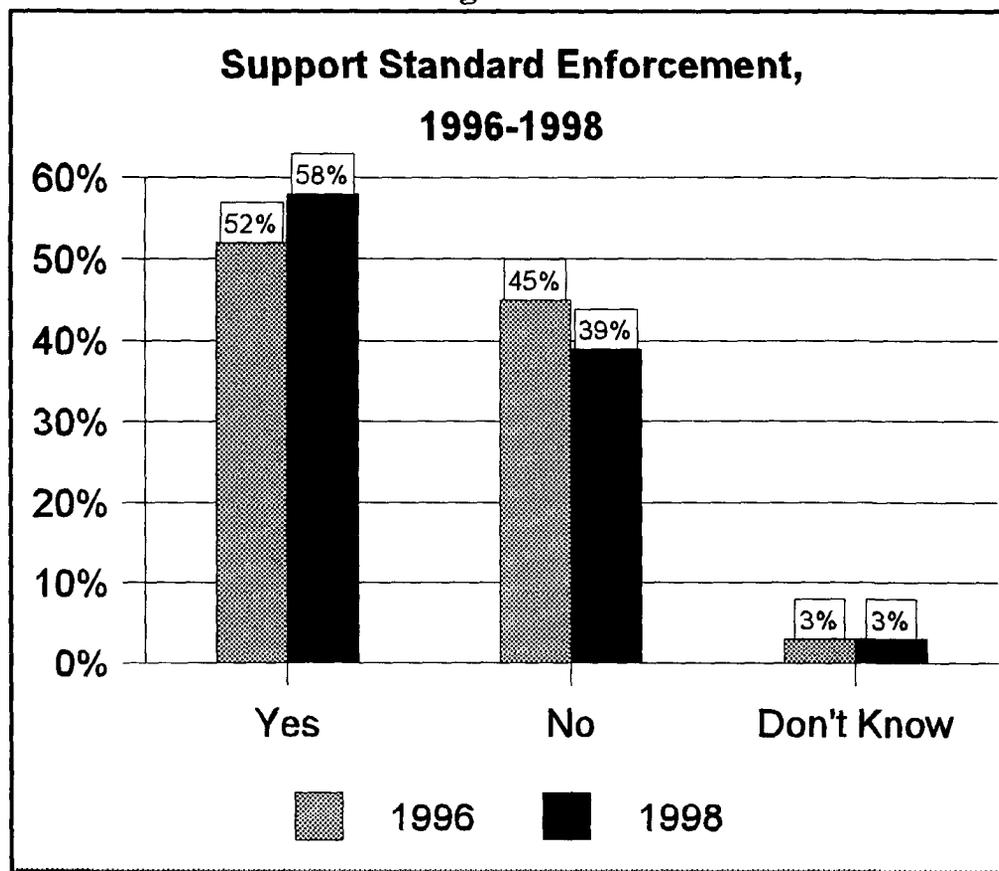
Base: Believe their State has a seat belt law.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Support For Standard Enforcement, 1996-1998

The 1996 survey introduced a question which asked if law enforcement officers should be allowed to stop a motor vehicle if they observed a seat belt violation but no other law was being broken. Support for the standard enforcement provision was 52% in 1996, and increased to 58% in 1998.

Figure 118



Qx: In your opinion, should police be allowed to stop a vehicle if they observe a seat belt violation when no other traffic laws are being broken?

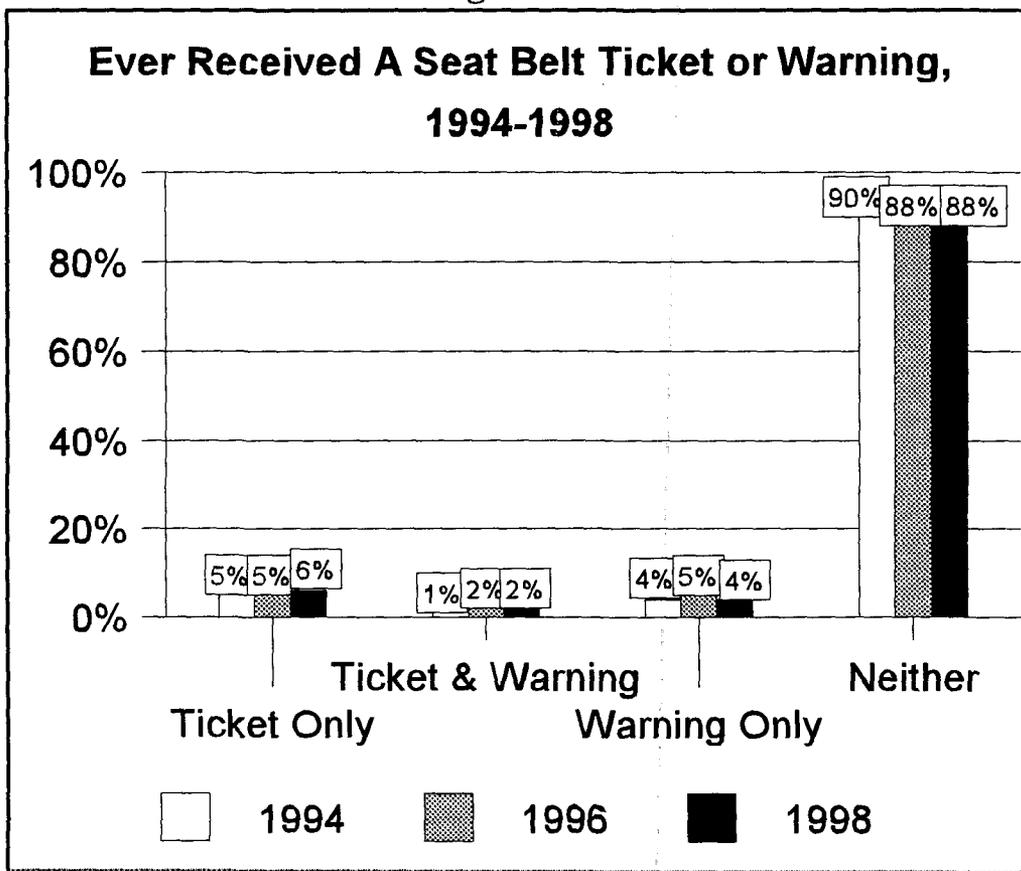
Base: Total population age 16+

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Ever Received A Seat Belt Ticket Or Warning, 1994-1998

The percentage of the population who reported that they never had received a seat belt ticket or warning did not change from two years earlier, remaining at 88%.

Figure 119



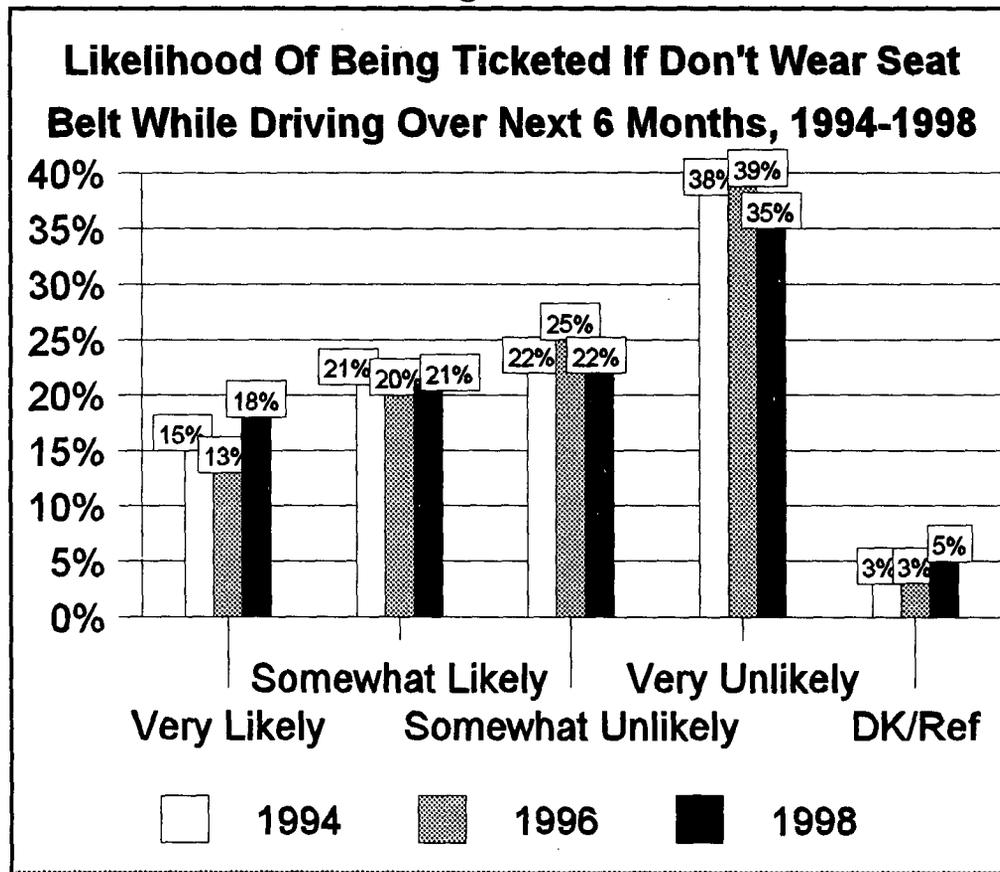
- Qx: Did you receive a ticket for violating seat belt laws?*
- Qx: Did you receive a warning for violating seat belt laws?*
- Qx: Have you ever received a ticket for not wearing seat belts?*
- Qx: Have you ever received a warning for not wearing seat belts?*
- Base: Total population age 16+*

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Perceived Likelihood Of Being Ticketed, 1994-1998

In 1998, more drivers (18%) than in the previous surveys (13% and 15%) believed that they were very likely to receive a seat belt ticket if they did not wear a seat belt at all while driving over the next six months. In total, 39% of drivers expressed some level of agreement that they would be ticketed compared to 33% in 1996 and 37% in 1994. At the same time, the majority (56%) continued to view this as unlikely.

Figure 120



Qx: Assume that you do not wear your seat belt AT ALL while driving over the next six months. How likely do you think you will be to receive a ticket for not wearing a seat belt?

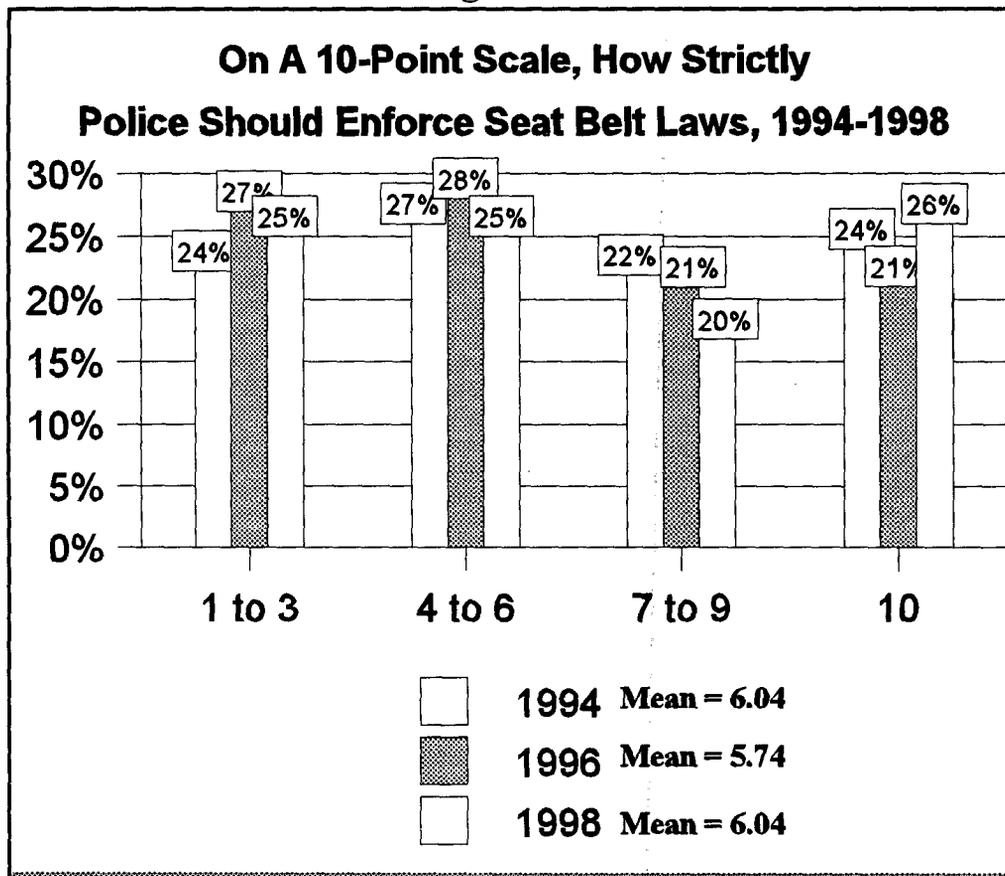
Base: Drives a motor vehicle.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Level Of Support For Enforcing Seat Belt Laws, 1994-1998

The percentage of the public who believed that police should give tickets at every opportunity when it comes to enforcing seat belt laws increased 5 percentage points from 1996 to 1998. The public's general response in 1998 was similar to the results of the 1994 survey, with the mean score on the 10-point scale being virtually the same for both years.

Figure 121



Qx: How often do you think police should ticket for seat belt violations? On a scale of 1 to 10, where 1 means police should hardly ever give tickets and 10 means police should give tickets at every opportunity when it comes to enforcing seat belt laws, how strict should police enforcement be?

Base: Total population age 16+

**The means exclude respondents in the Don't Know/Refused category*

1998 SURVEY RESULTS

APPENDIX A

***PRECISION OF SAMPLE ESTIMATES**

***Reprinted from:**

Boyle, J. and K. Sharp. 1998 Motor Vehicle Occupant Safety Survey: Methodology Report. DOT-HS-809-029. Washington DC: U.S. Department of Transportation, National Highway Traffic Safety Administration.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

Precision of Sample Estimates

The objective of the sampling procedures used on this study was to produce a random sample of the target population. A random sample shares the same properties and characteristics of the total population from which it is drawn, subject to a certain level of sampling error. This means that with a properly drawn sample we can make statements about the properties and characteristics of the total population within certain specified limits of certainty and sampling variability.

The confidence interval for sample estimates of population proportions, using simple random sampling without replacement, is calculated by the following formula:

$$\text{var}(x) = z \sqrt{\frac{p(q)}{n-1}}$$

Where:

- var (x) = the expected sampling error of the mean of some variable, expressed as a proportion
- p = some proportion of the sample displaying a certain characteristic or attribute
- q = (1 - p)
- z = the standardized normal variable, given a specified confidence level (1.96 for samples of this size).
- n = the size of the sample

The sample sizes for the surveys are large enough to permit estimates for subsamples of particular interest. Table 5, on the next page, presents the expected size of the sampling error for specified sample sizes of 8,000 and less, at different response distributions on a categorical variable. As the table shows, larger samples produce smaller expected sampling variances, but there is a constantly declining marginal utility of variance reduction per sample size increase.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

**TABLE 5
Expected Sampling Error (Plus or Minus)
At the 95% Confidence Level
(Simple Random Sample)**

Percentage of the Sample or Subsample Giving
A Certain Response or Displaying a Certain
Characteristic for Percentages Near:

| Size of Sample or Subsample | <u>10 or 90</u> | <u>20 or 80</u> | <u>30 or 70</u> | <u>40 or 60</u> | <u>50</u> |
|-----------------------------------|-----------------|-----------------|-----------------|-----------------|-----------|
| 8,000 | 0.7 | 0.9 | 1.0 | 1.1 | 1.1 |
| 4,000 | 0.9 | 1.2 | 1.4 | 1.5 | 1.5 |
| 3,000 | 1.1 | 1.4 | 1.6 | 1.8 | 1.8 |
| 2,000 | 1.3 | 1.8 | 2.0 | 2.1 | 2.2 |
| 1,500 | 1.5 | 2.0 | 2.3 | 2.5 | 2.5 |
| 1,300 | 1.6 | 2.2 | 2.5 | 2.7 | 2.7 |
| 1,200 | 1.7 | 2.3 | 2.6 | 2.8 | 2.8 |
| 1,100 | 1.8 | 2.4 | 2.7 | 2.9 | 3.0 |
| 1,000 | 1.9 | 2.5 | 2.8 | 3.0 | 3.1 |
| 900 | 2.0 | 2.6 | 3.0 | 3.2 | 3.3 |
| 800 | 2.1 | 2.8 | 3.2 | 3.4 | 3.5 |
| 700 | 2.2 | 3.0 | 3.4 | 3.6 | 3.7 |
| 600 | 2.4 | 3.2 | 3.7 | 3.9 | 4.0 |
| 500 | 2.6 | 3.5 | 4.0 | 4.3 | 4.4 |
| 400 | 2.9 | 3.9 | 4.5 | 4.8 | 4.9 |
| 300 | 3.4 | 4.5 | 5.2 | 5.6 | 5.7 |
| 200 | 4.2 | 5.6 | 6.4 | 6.8 | 6.9 |
| 150 | 4.8 | 6.4 | 7.4 | 7.9 | 8.0 |
| 100 | 5.9 | 7.9 | 9.0 | 9.7 | 9.8 |
| 75 | 6.8 | 9.1 | 10.4 | 11.2 | 11.4 |
| 50 | 8.4 | 11.2 | 12.8 | 13.7 | 14.0 |

NOTE: Entries are expressed as percentage points (+ or -)

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

However, the sampling design for this study included a separate, concurrently administered oversample of youth and young adults (age 16-39). Both the cross-sectional sample and the oversample of the youth/younger adult population were drawn as simple random samples; however, the disproportionate sampling of the age 16-39 population introduces a design effect that makes it inappropriate to assume that the sampling error for total sample estimates will be identical to those of a simple random sample.

In order to calculate a specific interval for estimates from a sample, the appropriate statistical formula for calculating the allowance for sampling error (at a 95% confidence interval) in a stratified sample with a disproportionate design is:

$$ASE = 1.96 \sqrt{\frac{g}{h^{1-g}} \sum [W^2 \{(1-f_h) (S^2/n_h - 1)\}]}$$

where:

- ASE = allowance for sampling error at the 95% confidence level;
- h = a sample stratum;
- g = number of sample strata;
- w_h = stratum h as a proportion of total population;
- f_h = the sampling fraction for group h -- the number in the sample divided by the number in the universe;
- s²_h = the variance in the stratum h -- for proportions this is equal to p_h (1.0 - p_h);
- n_h = the sample size for the stratum h.

Although Table 5 above provides a useful approximation of the magnitude of expected sampling error, precise calculation of allowances for sampling error requires the use of this formula. To assess the design effect for sample estimates, we calculated sampling errors for the disproportionate sample for a number of key variables using the above formula. These estimates were then compared to the sampling errors for the same variables, assuming a simple random sample of the same size. The two strata (h¹ and h²) in the disproportionate sample were all respondents age 16-39 and all respondents age 40 and over respectively. The proportion for the 16-39 year old stratum (w¹) was 45.7 percent while the proportion for the 40 and over stratum (w²) was 54.3 percent.

As shown in Table 6 below, the disproportionate sampling increases the confidence interval by about 2 percent, compared to a simple random sample of the same size. This means that sample design introduces almost no measurable loss in sampling precision for total population

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

estimates, while increasing the precision of sampling estimates for the target population aged 16-39 years old. Since the difference in sampling precision between the stratified disproportion sample and a simple random sample is less than one tenth of percentage point in each case, the sampling error table for a simple random sample will provide a reasonable approximation of the precision of sampling estimates in the survey.

1998 MOTOR VEHICLE OCCUPANT SAFETY SURVEY

TABLE 6
Design Effect on Confidence Intervals for Sample Estimates
Between Disproportionate Sample Used in Occupant Protection Survey
And a Proportionate Sample of Same Size

----- CONFIDENCE INTERVALS -----
 PERCENTAGE POINTS ± AT 95% CONFIDENCE LEVEL

| | HYPOTHETICAL PROPORTIONATE SAMPLING* | CURRENT DIS- PROPORTIONATE SAMPLING | DIFFERENCE IN CONFIDENCE INTERVALS ABOUT ESTIMATES |
|--|--|---|---|
| <i>USE NEW VARIABLES</i> | | | |
| <i>Driven in the past year</i> | .61 | .63 | +3.2% |
| <i>Drunk alcohol in past year</i> | 1.39 | 1.37 | -1.3% |
| <i>Always use safety belt</i> | .93 | .94 | +0.7% |
| <i>Dislike seat belts</i> | 1.55 | 1.61 | +3.4% |
| <i>Always use passenger belt (front)</i> | 1.40 | 1.40 | 0.0% |
| <i>Favor (a lot) seat belt laws</i> | 1.45 | 1.48 | +2.0% |
| <i>Secondary enforcement</i> | 1.41 | 1.44 | +2.0% |
| <i>Ever ticketed by police for seatbelt</i> | .85 | .83 | -2.6% |
| <i>Recall Crash dummies</i> | 1.11 | 1.17 | +5.0% |
| <i>Ever injured in vehicle accident</i> | .94 | .97 | +2.9% |
| <i>Drives a car for work almost every day</i> | 2.64 | 2.76 | +4.3% |
| <i>Set a good example for others</i> <i>(reason for using seat belts)</i> | 1.43 | 1.47 | +2.6% |
| <i>Driver-side only Air Bag in vehicle</i> | 2.04 | 2.08 | +1.6% |
| <i>Race: Black/African American</i> | 0.66 | 0.65 | -0.5% |
| <i>Ethnicity: Hispanic</i> | 0.63 | 0.61 | -4.0% |
| <i>Male/Female</i> | 1.08 | 1.10 | +2.2% |
| <i>AVERAGE DIFFERENCE IN CONFIDENCE INTERVALS</i> | | | +1.94% |

* Total sample proportions using SRS formula

Estimating Statistical Significance

The estimates of sampling precision presented in the previous section yield confidence bands around the sample estimates, within which the true population value should lie. This type of sampling estimate is appropriate when the goal of the research is to estimate a population distribution parameter. However, the purpose of some surveys is to provide a comparison of population parameters estimated from independent samples (e.g. annual tracking surveys) or between subsets of the same sample. In such instances, the question is not simply whether or not there is any difference in the sample statistics which estimate the population parameter, but rather is the difference between the sample estimates statistically significant (i.e., beyond the expected limits of sampling error for both sample estimates).

To test whether or not a difference between two sample proportions is statistically significant, a rather simple calculation can be made. Call the total sampling error (i.e., var (x) in the previous formula) of the first sample s_1 and the total sampling error of the second sample s_2 . Then, the sampling error of the difference between these estimates is sd which is calculated as:

$$sd = \sqrt{s_1^2 + s_2^2}$$

Any difference between observed proportions that exceeds sd is a statistically significant difference at the specified confidence interval. Note that this technique is mathematically equivalent to generating standardized tests of the difference between proportions.

An illustration of the pooled sampling error between subsamples for various sizes is presented in Table 7. This table can be used to indicate the size of difference in proportions between drivers and non-drivers or other subsamples that would be statistically significant.

TABLE 7. Pooled Sampling Error Expressed as Percentages For Given Sample Sizes (Assuming P=Q)

| Sample Size | | | | | | | | | | | | | | | | | |
|--------------------|-----------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 4000 | 14.1 | 10.0 | 7.1 | 5.9 | 5.1 | 4.7 | 4.3 | 4.0 | 3.8 | 3.6 | 3.5 | 3.0 | 2.7 | 2.5 | 2.4 | 2.3 | 2.2 |
| 3500 | 14.1 | 10.0 | 7.1 | 5.9 | 5.2 | 4.7 | 4.3 | 4.1 | 3.8 | 3.7 | 3.5 | 3.0 | 2.7 | 2.6 | 2.4 | 2.3 | |
| 3000 | 14.1 | 10.0 | 7.2 | 5.9 | 5.2 | 4.7 | 4.4 | 4.1 | 3.9 | 3.7 | 3.6 | 3.1 | 2.8 | 2.7 | 2.5 | | |
| 2500 | 14.1 | 10.0 | 7.2 | 6.0 | 5.3 | 4.8 | 4.5 | 4.2 | 4.0 | 3.8 | 3.7 | 3.2 | 2.9 | 2.8 | | | |
| 2000 | 14.2 | 10.1 | 7.3 | 6.1 | 5.4 | 4.9 | 4.6 | 4.3 | 4.1 | 3.9 | 3.8 | 3.3 | 3.1 | | | | |
| 1500 | 14.2 | 10.2 | 7.4 | 6.2 | 5.5 | 5.1 | 4.7 | 4.5 | 4.3 | 4.1 | 4.0 | 3.6 | | | | | |
| 1000 | 14.3 | 10.3 | 7.6 | 6.5 | 5.8 | 5.4 | 5.1 | 4.8 | 4.7 | 4.5 | 4.4 | | | | | | |
| 900 | 14.4 | 10.4 | 7.7 | 6.5 | 5.9 | 5.5 | 5.2 | 4.9 | 4.8 | 4.6 | | | | | | | |
| 800 | 14.4 | 10.4 | 7.8 | 6.6 | 6.0 | 5.6 | 5.3 | 5.1 | 4.9 | | | | | | | | |
| 700 | 14.5 | 10.5 | 7.9 | 6.8 | 6.1 | 5.7 | 5.5 | 5.2 | | | | | | | | | |
| 600 | 14.6 | 10.6 | 8.0 | 6.9 | 6.3 | 5.9 | 5.7 | | | | | | | | | | |
| 500 | 14.7 | 10.8 | 8.2 | 7.2 | 6.6 | 6.2 | | | | | | | | | | | |
| 400 | 14.8 | 11.0 | 8.5 | 7.5 | 6.9 | | | | | | | | | | | | |
| 300 | 15.1 | 11.4 | 9.0 | 8.0 | | | | | | | | | | | | | |
| 200 | 15.6 | 12.1 | 9.8 | | | | | | | | | | | | | | |
| 100 | 17.1 | 13.9 | | | | | | | | | | | | | | | |
| 50 | 19.8 | | | | | | | | | | | | | | | | |
| | 50 | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1500 | 2000 | 2500 | 3000 | 3500 | 4000 |
| Sample Size | | | | | | | | | | | | | | | | | |

1998 SURVEY RESULTS

APPENDIX B

**STATE HIGHWAY SAFETY LAWS
AT TIME OF SURVEY**

STATE HIGHWAY SAFETY LAWS- KEY PROVISIONS OF SAFETY BELT USE **October 31, 1998**

| State | 1 st Belt Law | Enforcement | Fine | Seats | Vehicle and Coverage by Law | * Usage Rate % |
|-------------------|--------------------------|-------------|------|-------|---|----------------|
| Alabama | July 18, 1992 | Secondary | \$25 | Front | Passenger car from model year 1965. | 52 |
| Alaska | September 12, 1990 | Secondary | \$15 | All | Motor vehicle. Age 16 and over. | 69 |
| American Samoa | January 1, 1989 | Primary | \$25 | All | Passenger car, truck, and van. | 81 |
| Arizona | January 1, 1991 | Secondary | \$10 | Front | Passenger car and van from model year 1972. | 63 |
| Arkansas | July 15, 1991 | Secondary | \$25 | Front | Passenger car, truck, and van. | 48 |
| California | January 1, 1986 | Primary | \$20 | All | Passenger car, van, and small truck. | 88 |
| Colorado | July 1, 1987 | Secondary | \$15 | Front | Passenger car, van, taxi, ambulance, RV and small truck. | 59 |
| Connecticut | January 1, 1986 | Primary | \$15 | Front | Passenger car, van, and truck. | 64 |
| Delaware | January 1, 1992 | Secondary | \$20 | Front | Passenger car. | 60 |
| Dist. of Columbia | December 12, 1985 | Primary | \$50 | All | Vehicle seating 8 or less people. 2 points on license | 66 |
| Florida | July 1, 1986 | Secondary | \$30 | Front | Motor vehicle and pickup truck. | 60 |
| Georgia | September 1, 1988 | Primary | \$15 | Front | Passenger vehicle for under 10 people and pickup for under age 18 | 68 |
| Guam | November 20, 1986 | Primary | \$70 | Front | Passenger car, truck, and van. | 94 |
| Hawaii | December 16, 1985 | Primary | \$20 | Front | All Vehicles manufactured with seatbelt or seatbelt installed | 80 |
| Idaho | July 1, 1986 | Secondary | \$5 | Front | Motor vehicle under 8 thousand pounds. | 54 |
| Illinois | July 1, 1985 | Secondary | \$25 | Front | Motor vehicle to carry under 10 people and RV. | 64 |
| Indiana | July 1, 1987 | Primary | \$25 | Front | Passenger car, bus, and school bus. | 63 |
| Iowa | July 1, 1986 | Primary | \$10 | Front | Passenger car, van, and truck 10 thousand pounds or less. | 75 |
| Kansas | July 1, 1986 | Secondary | \$10 | Front | Passenger car and van. | 56 |
| Kentucky | July 13, 1994 | Secondary | \$25 | All | Motor vehicles from model year 1965. | 54 |
| Louisiana | July 1, 1986 | Primary | \$25 | Front | Passenger car, van, and truck under 6 thousand pounds. | 67 |
| Maine | December 27, 1995 | Secondary | \$25 | All | Passenger vehicles. | 61 |
| Mariana Islands | April 20, 1990 | Primary | \$25 | All | Passenger car and truck. | 80 |
| Maryland | July 1, 1986 | Primary | \$25 | Front | Passenger/multi-purpose vehicle, truck, tractor, and bus. | 71 |
| Massachusetts | February 1, 1994 | Secondary | \$25 | All | Passenger car, van, and truck. | 53 |
| Michigan | July 1, 1985 | Secondary | \$25 | Front | Motor vehicle. | 70 |
| Minnesota | August 1, 1986 | Secondary | \$25 | Front | Passenger car, pickup truck, van, and RV. | 65 |
| Mississippi | March 20, 1990 | Secondary | \$25 | Front | Passenger car and van. | 48 |
| Missouri | September 28, 1985 | Secondary | \$10 | Front | Passenger car to carry under 10 people. | 62 |
| Montana | October 1, 1987 | Secondary | \$20 | All | Motor vehicle. | 73 |
| Nebraska | January 1, 1993 | Secondary | \$25 | Front | Motor vehicle. | 63 |
| Nevada | July 1, 1987 | Secondary | \$25 | All | Passenger car under 6 thousand pounds. | 70 |
| New Jersey | March 1, 1985 | Secondary | \$20 | Front | Passenger car. | 62 |
| New Mexico | January 1, 1986 | Primary | \$25 | Front | Motor vehicle under 10 thousand pounds. | 87 |
| New York | December 1, 1984 | Primary | \$50 | Front | Passenger car. | 74 |
| North Carolina | October 1, 1985 | Primary | \$25 | Front | Passenger motor vehicle to carry under 10 people. | 83 |
| North Dakota | July 14, 1994 | Secondary | \$20 | Front | Motor vehicle. | 49 |
| Ohio | May 6, 1986 | Secondary | \$25 | Front | Passenger/commercial car, van, tractor, and truck. | 65 |
| Oklahoma | November 1, 1997 | Primary | \$10 | Front | Passenger car, van, and pickup truck. | 60 |
| Oregon | December 7, 1990 | Primary | \$75 | All | Motor vehicle. | 85 |
| Pennsylvania | November 23, 1987 | Secondary | \$10 | Front | Passenger car, truck, and motor home. | 65 |
| Puerto Rico | January 19, 1975 | Primary | \$10 | Front | Passenger car. Over age 4. | 66 |
| Rhode Island | June 18, 1991 | Secondary | No | All | Passenger car. Over age 12. | 58 |
| South Carolina | July 1, 1989 | Secondary | \$10 | Front | Passenger car, truck, van, RV, and taxi. | 61 |
| South Dakota | January 1, 1995 | Secondary | \$20 | Front | Passenger car, truck, van, RV, and taxi. | 59 |
| Tennessee | April 21, 1986 | Secondary | \$10 | Front | Vehicle under 8.5 thousand pounds. | 61 |
| Texas | September 1, 1985 | Primary | \$25 | Front | Passenger car, van, and certain trucks. | 75 |
| Utah | April 28, 1986 | Secondary | \$10 | Front | Motor vehicle. | 63 |
| Vermont | January 1, 1994 | Secondary | \$10 | All | Passenger car. | 71 |
| Virgin Islands | October 1, 1991 | Primary | \$25 | Front | Passenger car. | 92 |
| Virginia | January 1, 1988 | Secondary | \$25 | Front | Motor vehicle. | 67 |
| Washington | June 11, 1986 | Secondary | \$35 | All | Passenger/multi-purpose vehicle, bus, and truck. | 82 |
| West Virginia | September 1, 1993 | Secondary | \$25 | Front | Passenger car. Age 18 and under in rear seat. | 58 |
| Wisconsin | December 1, 1987 | Secondary | \$10 | All | Motor vehicle. | 62 |
| Wyoming | June 8, 1989 | Secondary | No | Front | Passenger car, van, and pickup truck. | 75 |

Total Use Laws: 49 States + D.C., Puerto Rico, and the Territories.

*Reported March 1998

DOT HS 809 051
March 2000



U.S. Department of Transportation
**National Highway Traffic Safety
Administration**

NTSA
People Saving People
www.nhtsa.dot.gov